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Inception Meeting of the Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security (GEF ID 9607)

Videoconference, 20-22 July 2020

GEF CEO endorsement Request (Project Document) and related Annexes of Child Project 2.1 (GEF ID 9687)

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GEF 6 RE UEST FOR PRO ECT ENDORSEMENT APPROVAL

PRO ECT T PE FULL SI ED PRO ECT T PE OF TRUST FUND GEF TRUST FUND

For more information about GEF, visit TheGEF.org

PART I PRO ECT INFORMATION

Project Title: Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection.					
Country(ies):	Albania, Algeria, Bosnia and	GEF Project ID:1		9687	
	Herzegovina, Egypt, Lebanon,				
	Libya, Montenegro, Morocco and				
	Tunisia.				
GEF Agency(ies):	UNEP	GEF Agency Pro	oject ID:	01423	
Other Executing	UN Environment/MAP (leading	Submission Date	e:		
Partner(s):	executing Agency), UNESCO IHP,				
	PAP/RAC, Plan Blue, GWP-Med.				
GEF Focal Area (s):	International Waters	Project Duration	(Months)	60 months	
Integrated Approach Pilot	IAP-Cities IAP-Commodities	IAP-Food	Corporate l	Program: SGP	
	Security				
Name of Parent Program	Mediterranean Sea Programme	Agency Fee (\$)		630,000	
-	(MedProgramme): Enhancing				
	Environmental Security – ID9607				

A. FOCAL AREA STRATEG FRAME OR AND OT ER PROGRAM STRATEGIES²

		(in)		n)
Focal Area O jecti es Pro rams	Focal Area Outcomes	Trust Fund	GEF Project Financin	Co financin
IW-2 Program 3	3.1 Improved governance of shared water bodies, including conjunctive management of surface and groundwater through regional institutions and frameworks for cooperation lead to increased environmental and socio-economic benefits.	GEFTF	3,500,000	4,300,231
IW-3 Program 6	6.1 Coasts in globally most significant areas protected from further loss and degradation of coastal habitats while protecting and enhancing livelihoods.	GEFTF	3,500,000	138,970,000
	Total roject costs		7,000,000	143,270,231

. PRO ECT DESCRIPTION SUMMAR

Project O jecti e Im ro in ater securit in coastal hot s ots.			human and ecos ste	em health	and climat	e resilience
Project Com onents Pro rams	Financi n T e	Project Outcomes	Project Out uts	Trust Fund	GEF Project Financin	Confirmed Co financin
1. Coastal Zone Management	TA	Outcome 1 Coastal zone sustainability in	Out ut 1.1 Multi-stakeholders' consultations on	GEFTF	3,375,500	131,463,779

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on <u>GEF 6 Results Frameworks for GETF, LDCF and SCCF</u> and <u>CBIT programming directions</u>.

³ Financing type can be either investment or technical assistance.

	1	1	ICTM Day 1	Ι		1
		beneficiary	ICZM Protocol ratification and			
		countries enhanced	implementation.			
		through the	implementation.			
		expanded	Out ut 1.2			
		compliance with	Inter-Ministerial			
		the ICZM	Coordination			
		Protocol and the	mechanisms for			
		adoption of	coastal			
		national ICZM	management in			
		strategies, coastal	place.			
		plans and				
		instruments, and	Out ut 1.			
		improved gender	ICZM			
		equality.	Strategies/plans			
			developed and			
			adopted.			
			Out ut 1.			
			A series of training			
			events in ICZM,			
			MSP and CVC			
			adaptation			
			developed and			
			implemented.			
			Out ut 1.			
			Raised awareness			
			on the approaches			
			promoted by the			
			project (with attention to the			
			engagement of			
			private sector).			
2. Management of	TA	Outcome 2	Out ut 2.1	GEFTF	3,291,500	10,332,000
Coastal Aquifers		Increased	Detailed			
and Related		resilience to	assessments of the			
Ecosystems		climatic	current state of			
		variability and	priority coastal			
		change, and	aquifers and related			
		enhanced water	coastal ecosystems,			
		security of	vulnerability maps			
		coastal populations	and recommendations			
		through	for land use			
		improved	planning			
		sustainability of	addressing relevant			
		services provided	stakeholders,			
		by coastal	including private			
		aquifers and by	sector, national and			
		groundwater-	local water			
		related coastal	associations and			
		habitats.	water users.			
			0-44-2-2			
			Out ut 2.2 National Dialogues			
			identifying			
	l	l	ruentii yiiig			

	T I	1	1
potential conjunctive management solutions, incl stakeholders' training modu designed and implemented.			
Out ut 2. National Assessments of Submarine Groundwater Discharges and Marine — Freshwater Interactions.			
Out ut 2. Priority aquife coastal management produced incl design and fie testing of aqui monitoring m purpose network and protocols	plans uding old ifer ulti- orks		
Out ut 2. Facilitation of broader adopt approaches promoted by the project with attention on letterm sustainal and engagement private sector national and I water associate and water use	ion of the ong bility ent of cocal cions rs.	6.67,000	141 705 770
	btotal GEETE	6,667,000	141,795,779 1,474,452
Project Management Cost (PMC) ⁴ GEFTF 333,000 1,474,45 Total roject costs 7,000,000 143,270,23			
1 otal Toject	CUSIS	7,000,000	173,270,231

C. CONFIRMED SOURCES OF **CO FINANCING** FOR T E PRO ECT NAME AND T PE

Please include evidence for co-financing for the project with this form.

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

Sources of Co financin	Name of Co financier	T e of Cofinancin	Amount ()
Executing Agencies	UN Environment/MAP, UNESCO-IHP,	In Cash and In Kind	13,609,361
	PAP/RAC, Plan Bleu and GWP-Med.		
Recipient Government	Algeria	In Kind	4,551,270
Recipient Government	Egypt	In Kind	4,064,000
Recipient Government	Lebanon	In Kind	57,723,600
Recipient Government	Libya	In Kind	600,000
Recipient Government	Montenegro	In Kind	6,100,000
Recipient Government	Morocco	In Kind	18,000,000
Recipient Government	Tunisia	In Kind	38,622,000
Total Co financin			143,270,231

D. TRUST FUND RESOURCES RE UESTED AGENC (IES) COUNTR (IES) FOCAL AREA AND T E PROGRAMMING OF FUNDS

						(in)	
GEF A enc	Trust Fund	Countr Name Glo al	Focal Area	Pro rammin of Funds	GEF Project Financin (a)	A enc Fee a) (b) ²	Total (c)=a+b
UNEP	GEF TF	Regional	International Waters	(select as applicable)	7,000,000	630,000	7,630,000
					7,000,000		
Total Gr	Total Grant Resources					630,000	7,630,000

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRI UTIONS TO GLO AL ENVIRONMENTAL ENEFITS

Provide the expected project targets as appropriate.

Cor orate Results	Re lenishment Tar ets	Project Tar ets
Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	12,500,000 hectares (of landscape only)
Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	hectares
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	1 Number of freshwater basins
to sustainable use and maintenance of ecosystem services	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	Percent of fisheries, by volume
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	metric tons
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	metric tons
global concern	Reduction of 1000 tons of Mercury	metric tons
	Phase-out of 303.44 tons of ODP (HCFC)	ODP tons
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and subnational policy, planning financial	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	Number of Countries:
and legal frameworks	Functional environmental information systems are established to support decision-making in at least 10 countries	Number of Countries:

Pro	ject Core Indicators	Ex ected at CEO Endorsement
1	Terrestrial rotected areas created or under improved management for conservation and sustainable use (Million	
	Hectares)	

Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

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2	Marine rotected areas created or under improved management	
	for conservation and sustainable use (Million Hectares)	
3	Area of land restored (Million Hectares)	
4	Area of landsca es under im ro ed ractices (excluding protected areas)(Million Hectares)	12,500,000
5	Area of marine ha itat under im ro ed ractices (excluding protected areas)(Million Hectares)	
	Total area under improved management (Million Hectares)	12,500,000
6	Greenhouse Gas Emissions Miti ated (Million metric tons of CO2e)	
7	Num er of shared ater ecos stems (fresh or marine) under new or improved cooperative management	1
8	Globally over-exploited marine fisheries moved to more	
	sustainable levels (thousand metric tons)(Percent of fisheries, by	
	volume)	
9	Reduction , disposal/destruction, phase out, elimination and avoidance of chemicals of lo al concern and their waste in the environment and in processes, materials and products (thousand metric tons of toxic chemicals reduced)	
10	Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of direct eneficiaries disa re ated ender as co-	4,000 (2,000 Female - 2,000
	benefit of GEF investment	Male)

F. DOES T E PRO ECT INCLUDE A "NON GRANT" INSTRUMENT NO

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

PART II PRO ECT USTIFICATION

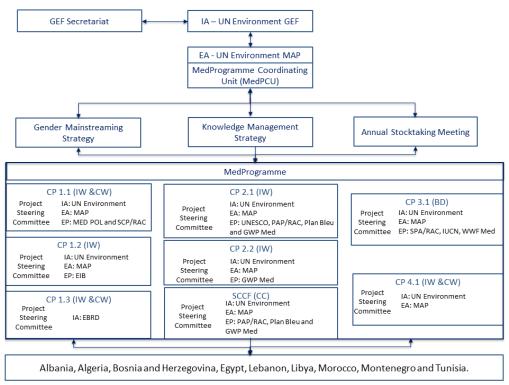
O er ie of the MedPro ramme and context of the Child Project 2.1

The GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (2019-2024) ⁶ represents the first GEF programmatic multi-focal area initiative in the Mediterranean Sea aiming to operationalize priority actions to reduce major transboundary environmental stresses in its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The MedProgramme is implemented in nine beneficiary

⁶ GEF Lead Implementing Agency: UN Environment. Other GEF Implementing Agency: European Bank for Reconstruction and Development (EBRD). Leading Executing Agency: UN Environment/MAP. Executing partners: UNESCO International Hydrological Programme (IHP), European Investment Bank (EIB), Global Water Partnership – Mediterranean (GWP-Med), WWF Mediterranean Programme Office (WWF MedPO), IUCN, Priority Actions Programme Regional Activity Centre (PAP/RAC), Plan Bleu Regional Activity Centre (Plan Bleu), Specially Protected Areas Regional Activity Centre (SPA/RAC) and the Sustainable Consumption and Production Regional Activity Centre (SCP/RAC).

countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. Its eight Child Projects⁷ cut across four different Focal Areas of the Global Environment Facility (International Waters [IW], Biodiversity [BD], Chemicals and Waste [CW], and Climate Change [CC]) and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, governmental and non-governmental bodies, industry, research, media, and various other organizations. It builds on the MedPartnership and ClimVar & ICZM8 GEF projects which have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries, UN bodies, civil society organizations, bilateral donors and the European Union (EU); and tested on the ground the feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate related impacts.

The eight Child Projects (CP) of the MedProgramme (Figure 1 and Table 1) are expected to deliver a set of complementary results embracing three categories of priorities identified by the TDA for the Mediterranean Sea which are translated into three components of the programme: i) Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts; ii) Enhancing Sustainability and Climate Resilience in the Coastal Zone; and iii) Protecting Marine Biodiversity.



Fi ure 1 MedProgramme Structure

Ta le 1 MedProgramme Components, Child Projects and GEF Focal Areas

⁷ At the time of its approval in October 2016, the MedProgramme was comprised of seven Child Projects. Subsequently, a Mediterranean climate change adaptation project was developed by UN Environment/MAP for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF Secretariat that this SCCF project would be managed for all intents and purposes as an additional Child Project of the MedProgramme. Hence the reference to eight Child Projects of the MedProgramme. ⁸ More info on MedPartnership, ClimVar and ICZM (Integration of climatic variability and change into national

strategies to implement the ICZM Protocol in the Mediterranean) projects: http://www.themedpartnership.org/, https://iwlearn.net/iw-projects/2600 and https://iwlearn.net/iw-projects/3990.

Mediterranean Sea Pro-ramme (MedPro-ramme)				
MedPro ramme Com onent	Child Project	GEF Focal Areas		
	1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts"	IW and CW		
1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and measuring progress to impacts.	1.2 "Mediterranean Pollution Hot Spots Investment Project"	IW		
	1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"	IW and CW		
	2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"	IW		
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone.	2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS"	IW		
	SCCF "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas"	CC		
3. Protecting Marine Biodiversity	3.1 "Management Support and Expansion of Marine Protected Areas in Libya"	BD		
4. Knowledge Management and Programme Coordination	4.1 "Mediterranean Sea Large Marine Ecosystem Environment and Climate Regional Support Project"	IW and CW		

The fourth component (Knowledge Management and Programme Coordination) is comprised of Child Project 4.1 "Mediterranean Sea LME Environment and Climate Regional Support Project" which plays a key role within the MedProgramme as it "implements mechanisms for Programme-wide learning and dissemination of knowledge, monitoring the Programme's progress to impacts, and fostering synergistic interactions among Child Projects". Within the GEF programmatic approaches there is a need to ensure programme coherence and impact through coordination among diverse sets of multi-focal area Child Projects contributing to the same programme outcomes. A Support Project functions as a trait d'union (a common link) among Child Projects by providing overall coordination of the programme portfolio, resource-saving services, a robust system to managing knowledge effectively and a sound action plan for gender mainstreaming.

It is in this context that Child Project 2.1 "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection" will be carried out. Child Project 2.1 will play a crucial role in achieving the desired impacts of the MedProgramme by assisting countries, coastal zone managers and populations to protect and use sustainably the available coastal freshwater supply threatened by evolving climatic conditions, pollution, and competition at the water nexus, and to adopt coastal zone management

and land use policies respectful of the intrinsic vulnerabilities, carrying capacity, and cultural, social and economic functions of the Mediterranean coasts and ecosystems. Consistently with the design of the MedProgramme, Child Project 2.1 will operate in synergy with all the other Child Projects under Components 1 and 2 addressing the reduction of pollution from nutrients and persistent toxic substances in coastal hotspots of (Child Projects 1.1, 1.2, 1.3), the reuse of treated wastewaters (Child Project 1.2), the mainstreaming of climate change adaptation approaches in ICZM planning (the SCCF Project), and the resolution of conflicts at the water nexus (Child Project 2.2). The synergistic interactions among these projects will trigger catalytic impacts that will be enhanced and disseminated throughout the region by the MedProgramme-wide knowledge management and coordination project 4.1. Last but not least, Child Project 2.1 will by design bring together various executing partners playing important roles and actively engaged in the region, but so far acting primarily in a fragmented and sectorial way – PAP/RAC, UNESCO IHP, GWP Med and Plan Bleu. Their interaction may prove very effective in producing long lasting beneficial impacts in coastal zone management approaches in the Mediterranean region, better integration of hydrological, geological and environmental sciences with land use and water resources planning; education with capacity reinforcement; monitoring with policy making.

A. DESCRI E AN C ANGES IN ALIGNMENT IT T E PRO ECT DESIGN IT T E ORIGINAL PIF⁹
A.1. *Project Description*. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area¹⁰ strategies, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected

outcomes and components of the project, 4) <u>incremental/additional cost reasoning</u> and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and <u>co-financing</u>; 5) <u>global environmental benefits</u> (GEFTF) and/or <u>adaptation benefits</u> (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

No changes in the expected outcomes, indicators or targets have been introduced with respect to the approved Programme Framework Document (PFD) of the MedProgramme.

Algeria decided to endorse the MedProgramme on November 2017 following a re-organization in the government and frequent consultations with UN Environment/MAP and UN Environment GEF. In the Letter of Endorsement, Algeria reaffirms the alignment of the Government's national priorities with the goals of the MedProgramme and the commitment of the country to the global environmental conventions. For this reason Algeria has been added to the programme as beneficiaries of activities under several Child Projects, including the current one.

The project is submitted with a co-financing commitment of 143,270,231 USD. This pledge is sensibly higher than the one indicated in the PFD, i.e., greater than 25,000,000 USD. The higher level of co-financing is due to a thorough consultation with the countries and executing partners which was made during the preparation phase of Child Project 2.1 to identify all the initiatives, projects, investments, strategies ongoing at the national and regional levels which would contribute to the achievement of the goals of Child Project 2.1.

To date, co-financing commitments have been received from seven of the nine countries participating in the project (Algeria, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia) and by all the executing partners UN Environment MAP, UNESCO IHP, PAP/RAC, Plan Bleu and GWP Med. The two

⁹ For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter "NA" after the respective question.

¹⁰ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives

and programs, please also describe which $\underline{Aichi\ Target(s)}$ the project will directly contribute to achieving..

remaining countries – Albania and Bosnia and Herzegovina – have not yet transmitted their co-financing letters. Both countries are currently working to prepare their respective co-financing letters, which will then need to be cleared by several internal bodies and ministries before being submitted. Considering that the current co-financing pledge of Child Project 2.1 is much higher than the committed figure at the PFD stage, and to avoid delays in the submission of the Child Project 2.1, the GEF CEO Endorsement Request is submitted without the co-financing contribution of Albania and Bosnia and Herzegovina. However, these commitments will be included in the project co-financing budget as soon as the letters from the two countries are received. Specific justification for this change will be prepared during the inception phase of the MedProgramme to be submitted to for consideration to the first Steering Committee Meeting of Child Project 2.1

A. PRO ECT DESCRIPTION

1) T E GLO AL ENVIRONMENTAL AND ADAPTATION PRO LEMS ROOT CAUSES AND ARRIERS T AT NEED TO E ADDRESSED.

The full-fledged Transboundary Diagnostic Analysis (TDA) carried out in 2005 as part of the Global Environment Facility (GEF)/UN Environment project "Determination of priority actions for the further elaboration of the Strategic Action Program for the Mediterranean Sea", identified, and analyzed in some detail, four major transboundary environmental concerns (Table 2). They are:

- 1. Decline of biodiversity due to conversion and degradation of critical habitats, introduction of alien species, pollution in the form of excess nutrients and toxic wastes;
- 2. Decline in seawater quality due to inadequate sewage treatment, lack of application of best practice in the agricultural use of fertilizers and pesticides, inadequate controls on atmospheric emissions of heavy metals and persistent organic pollutants (POPs), inadequate discharge control for industries bordering the sea;
- 3. Human health risks due to exposure to POPs, the consumption of contaminated seafood, direct and indirect contact with seawater that is contaminated with pathogens and/or viral agents;
- 4. Degradation of coastal ecosystems and loss of related services due to growing demographic pressure and unregulated coastal development.

Ta le 2 Mediterranean Sea Large Marine Ecosystem (LME) - Transboundary Diagnostic Analysis

Mediterranean Sea Lar e Marine Ecos stem (LME) Trans oundar Dia nostic Anal sis						
Major En ironmental Concerns	Statement of the causes	Main Issues of Transboundary Concern				
Decline of iodi ersit	Pollution (sewage, oil, nutrients, etc.), invasive species, introduced species, land reclamation, river damming and flow modification, over-fishing, by-catch, and adverse effects of fishing gear and uses on marine habitats (e.g. bottom trawling), solid waste disposal at sea, uncontrolled tourist presence in ecologically sensitive areas, as well as inadequate public and stakeholder awareness, and inadequate or non-existent legislation and available enforcement means.	Land Based Pollution Degradation and Conversion of Critical Habitats: Sea Grass Meadows; Coastal Wetlands and Lagoons. Overexploitation of Marine Living resources Alien Species Introduction				
Decline in Sea ater	Land based sources of marine pollution,	Land Based Pollution:				

		I
ualit	both point and non-point, determine	(i) point sources (excess nutrients,
	increasing trends in eutrophication and its	toxics and persistent toxic substances).
	related oxygen deficiency and bloom of	(ii) non-point sources (mostly nutrients
	nuisance species; presence of hot spots of	from agriculture, and sediments).
	pollution (125 identified by TDA) leading	
	to decline in overall water quality, loss of	Anthropogenic Pressures on Coastal
	coastal habitats and biodiversity, and	Zones
	human health problems.	
uman ealth Ris s	Pollutants that degrade the ecosystem also	Land Based Pollution
	present risks to human health, including	
	heavy metals, organochlorines, pesticides,	
	hydrocarbons, and the like, but also	
	microbial and viral pollution. In addition,	
	the response of the ecosystem to stress	
	may induce toxicity, such as toxic	
	dinoflagellates that arise from eutrophic	Anthropogenic Pressures on Coastal
	conditions in some instances. This may	Zones
	affect human health in the region. Primary	
	pathways for human health risks include	
	ingestion of water or seafood products,	
	contact with contaminated seawater (or in	
	some cases beaches), and perhaps contact	
	with contaminated sea food (for marine	
	products workers).	
De radation and loss	Growing population and unregulated	
of coastal fresh ater	coastal development interfere with coastal	Anthropogenic pressure on Coastal
resources and of	processes, cause groundwater salinization,	Zones
coastal ecos stem	and degradation of coastal ecosystems	
ser ices.		

Ten years later, two follow up GEF/UN Environment projects complemented the 2005 TDA with supplemental information regarding two elements of the physical environment – climate change and variability, and the processes at the freshwater - seawater interface, including coastal aquifers – whose critical importance in determining present and future environmental security in the Mediterranean Sea and its coastal regions, had only recently been fully realized. The results of these supplementary diagnostics added new perspectives to the overall current state of the Mediterranean Sea and its coastal areas, that will guide future remedial and adaptation actions. These projects were:

- The GEF/UN Environment project "Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean" (ClimVar & ICZM Project) (completed in 2015) resulted in guidelines for adapting to climate variability and change in Mediterranean Sea littoral countries, and in the development of a pilot Integrated Coastal Zone Management (ICZM) plan integrating measures related to climate variability and change ready for implementation.
- The GEF/UN Environment project "Strategic Partnership for the Mediterranean Large Marine Ecosystem-Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and Its Coastal Areas" (MedPartnership) (completed in 2015) produced amongst others an assessment of coastal aquifers and related coastal ecosystems in all Southern and Eastern Mediterranean and Adriatic countries, a Supplement on Coastal Aquifers to the 2005 TDA, and sub-regional Action Plans for the protection an sustainable use of coastal aquifers and related ecosystems (wetlands and humid zones) for the Adriatic and for the Southern and Levantine Basin countries.

The two projects provided conclusive evidence that:

- (i) Climate change and variability will increasingly affect Mediterranean coasts and the livelihoods of ever-growing coastal populations, compounding all other issues of transboundary concern, with particularly severe impacts in identified hot spots;
- (ii) The critical role played by coastal aquifers within the context of the coastal zone including the shallow marine environment is fully confirmed.

It can be now stated, based on solid information, that:

- Coastal aquifers are a major water resource along the Mediterranean coastline, and often represent the main source of drinking water for the growing littoral populations;
- Submarine groundwater discharges are large, and in places superior to surface water inflows. Hence coastal aquifers contribute to, and sustain shallow marine ecosystems;
- Major coastal wetlands, lagoons, humid zones and coastal habitats, providing very valuable services and contributing to coastal livelihoods and biodiversity, are all in part or totally dependent on groundwater regimes.

In spite of all this, the regional picture that emerged from the assessment of the current state of these critically important resources was one of generalized neglect and progressive degradation.

2A) ASELINE SCENARIO REGIONAL LEVEL

The Mediterranean coastal zones

The total population of the Mediterranean countries grew from 276 million in 1970 to 466 million in 2010 and is predicted to reach 529 million by 2025. More than a third of this population lives in coastal territories totaling less than 12% of the surface area of the Mediterranean countries. The population of the coastal regions grew from 95 million in 1979 to 143 million in 2000 and could reach 174 million by 2025. Besides this constant growth of the permanent population, coastal tourism is another driver for coastal urbanization. The Mediterranean region hosts one third of the world's tourists which are attracted by the clean and transparent Mediterranean waters, the beaches and the scenic beauty of the Mediterranean landscapes and seascapes. Tourism is a huge consumer of natural resources used to supply visitors with a variety of goods and services: drinking water – an extremely scarce resource in many coastal areas; food – sometimes causing pressure on local production, especially of seafood, and leading to over-fishing; electric power and cooling/heating facilities – making tourism a massive consumer of energy. Moreover, the coastal tourism industry produces serious environmental impacts by causing marine and fresh water pollution through the discharge of sewage and the disposal of considerable quantities of solid waste.

Since the 1960s, due to these trends, pressures on the coastal zones have been growing throughout the Mediterranean. The fact that sea level rise is becoming increasingly certain does not stop this trend, and in some places does not even slow it down. The so-called ribbon or linear development (including infrastructure) continues along the Mediterranean coasts, exposing properties and humans to the risks caused by climate change in general, and sea level rise in particular. In addition to the fact that this kind of development is extremely inefficient and unsustainable, the only option for adaptation to sea level rise in such cases is to retreat from the coastline. Therefore, it is important to make governments, populations and investors aware of the problem and, in the longer run, ensure that the costs of remedies are born by the property owners.

High concentration of population and economic activities in the coastal zones exerts numerous pressures on resources; this relates for example to space occupation, to the water/food/energy/ecosystem nexus. Densely populated coastal regions, coupled with tourism activities, generate high pressures on water resources, in particular on aquifers as major freshwater resource; and on ecosystems, habitats, biodiversity and landscapes, emitting nutrients and wastewater, solid waste, marine litter and microplastics, as well as industrial waste into the environment. It is of utmost importance to address these issues at their origin,

i.e., to create conditions for minimizing pressures and impacts on the environment, to propose responses and solutions that address multiple pressures and influence drivers in a way to lead development towards sustainability.

These challenges could and should be handled by applying the integrated approach to the management of coastal zones that helps to control urbanization; to preserve the integrity of coastal and marine ecosystems; and to guide towards sustainable use of natural and cultural resources. It is by revealing and managing the space/water/food/energy/ecosystem nexus that the future development can be oriented towards sustainability and the efficient environmental protection ensured. Applying integrated coastal zone management (ICZM) principles will allow integrating environmental protection with spatial planning and economic development i.e., to integrate policies and establish frameworks for cooperation of all concerned stakeholders aimed at influencing current and future practices. Their active participation, raised awareness and sufficient capacity are the best guarantees of the needed change of behavior towards the environment. By acting on the source of pollution in application of the prevention and precautionary principles it is possible to cope with the pollution before it happens, this being the crucial dimension for attaining sustainability.

Impacts of climate change and variability

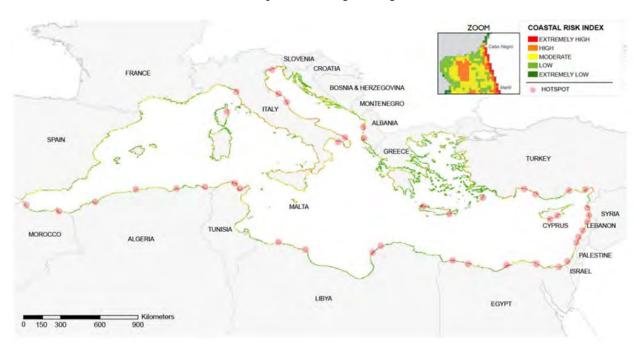
Research on climate variability and its impacts in the Mediterranean along with the findings contained in the Fifth Assessment Report of the IPCC are all in agreement on the broad future trends in climate variability in the Mediterranean, in spite of the complexity of factors controlling the Mediterranean climate. According to that report, by the end of the century the rise in temperatures is expected to be between 2°C and 4°C for the medium-low emissions scenario (RCP 4.5). At the same time, overall rainfall is also likely to decrease while the occurrence of extreme climatic events (flooding and drought) ought to intensify by 2100. An analysis of IPCC model projections for the 21st century finds a continuing decrease in precipitation that extends throughout the Mediterranean region and reaches values as high as 20% less than the current mean precipitation by the end of the century. The sea level is predicted to rise by between 30 cm and 40 cm by 2100, and changes will occur to water mass circulation. Marine acidification is likely to increase with some dramatic consequences to the balance of marine and coastal biodiversity.

During the 20th century, air temperature in the Mediterranean basin was observed to have risen by 1.4 °C to 4 °C depending on the sub-region. As such, the countries of the Mediterranean are already witnessing the impacts of climate change/variability in the coastal zone and watersheds of the Mediterranean Large Marine Ecosystem, such as decreasing water availability, increased incidents of flooding and forest fires. Climate variability in the Mediterranean is controlled by physical processes at both the local level, such as changes in the surface properties and land use, and at the global level, such as the changes in the large scale atmospheric circulation associated with global warming, the North Atlantic Oscillation (NAO), tropical monsoon and El Nino Southern Oscillation (ENSO). It should be noted that over the last 40-50 years the sea level trends within the Mediterranean basin differ significantly (increasing and decreasing) from those of the nearby Atlantic Ocean. It is unclear for how long the behavior of the Mediterranean Sea will differ from the open ocean, although it is unlikely that this will continue for more than 20-30 years. This also raises the question whether the Mediterranean Basin future sea level scenarios can be based on the global ones, as they do not include the relevant forcing mechanisms.

The countries of the Mediterranean recognize that with current projections there will be a number of climate impacts, including increased summer temperatures and decreased annual precipitation, increased water-related extreme phenomena like floods and persistent droughts, greater water scarcity and increased desertification, the loss of or shift in vegetation zones, threatened food production as a result of increased irrigation demands and more numerous incidents of plant diseases, human health hazards, particularly with regard to infectious diseases and increased heat-related mortality. While it is critically important that research work advances our understanding of how climate variability will impact the coastal zone

communities, natural resources and marine and coastal biodiversity of the Mediterranean, it is equally important to ensure that scientific information be made accessible to decision makers, and that actions be taken to integrate elements to improve sustainability in view of future climatic scenarios into current land use and water policies and practices, particularly in coastal zones.

Regional scale studies suggest that the Mediterranean is particularly vulnerable to increased flooding by storm surges as sea level rises: a one-meter rise in sea level would cause at least a six-fold increase in the number of people experiencing such flooding in a typical year, without considering population growth. All coastal wetlands appear threatened. Case studies of coastal cities (such as Venice and Alexandria), deltas (Nile, Po, Rhone and Ebro), and islands (Cyprus) support the need to consider climate change in coastal planning. However, the critical issues vary from site to site and from setting to setting. In deltaic areas and low-lying coastal plains, the effects of climate change, particularly sea level rise, are already considered an important issue, but elsewhere this is not the case. The case for mainstreaming considerations of climate change in coastal planning is further supported by the findings of the ClimVar & ICZM Project, which evaluated climate-related hazards in Mediterranean coastal areas and produced a coastal risk index (based on threats of erosion, flooding, and seawater intrusion), resulting in the identification of numerous climate risk hotspots in the region (Figure 2).



Fi ure $2\,Ma$ of assessed coastal ris indices (ased on climate related ha ards) and hots ots in the Mediterranean (MedSea Foundation and Plan leu $2\,16$)

When exploring the link between ICZM and climate variability and change, one should not lose sight of the fact that climate change mainly comes into play by accentuating threats and problems – sometimes opportunities – that already exist. Currently, problems in Mediterranean coastal zones do not stem from the impact of climate change but from the impact of unsustainable development models upon which economic systems are based. The problem of coastal erosion is a good example of this. It is a major challenge for many Mediterranean coastal zones but it is mainly related to:

 coastal installations: sea defense facilities which prevent shore drift and accelerate erosion down shore, walls and rock armor at the top of the beach, destruction of dunes by treading or construction, etc. • river installations: it is estimated that sediment input from rivers decreased by 90% in the second half of the 20th century because of the construction of dams and the massive extraction of granular material.

One of the primary climate change impacts is on freshwater resources availability for the main economic sectors and for dependent ecosystems. Situations of water scarcity in combination with expected climate change-related phenomena will lead to reduced runoff and groundwater recharge and consequently to diminished water quality and quantity in some countries. Lower precipitation and increasing temperatures in the southern and eastern Mediterranean will exacerbate aridness, land degradation and desertification. Sea level rise and storm-related floods will make low-lying zones and coastal activities increasingly vulnerable to submersion and beaches vulnerable to erosion.

Mediterranean coasts are highly urbanized, and due to the high predominance of summer tourism, most of the touristic facilities tend to locate as close to the sea as possible. Rising sea levels may endanger a high proportion of the coastal facilities including adjacent infrastructure. Losses of coastal and marine habitats and ecosystems are also largely implied.

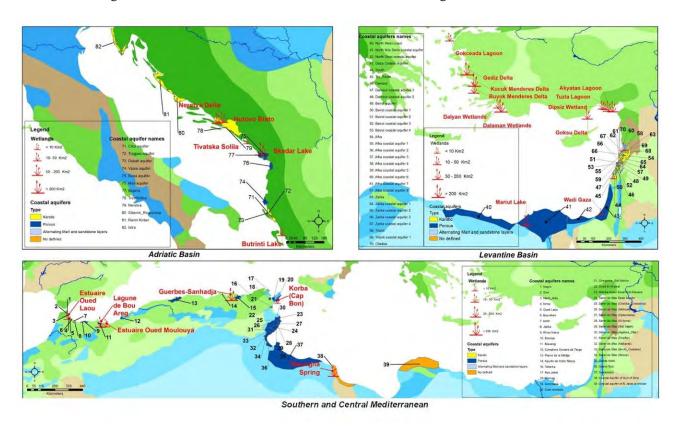
Economic loss due to decreased tourism will significantly impact the region, particularly men and women who derive their livelihoods from the sector. Additionally, the Mediterranean populace will face climate risks themselves, further exposing the socioeconomically vulnerable, and reducing their capacities and opportunities to adapt. In this context, women are particularly vulnerable: as they fulfill traditional roles of provisioning household water and fuel, their time poverty (the opportunity cost of hours lost on performing unpaid care/domestic work, that could have otherwise been used for remunerative economic activity) is likely to increase. With the predicted loss of livelihoods from the tourism sector, women also face increasing pressure in their traditional and cultural gender roles, as these too heavily rely on steady water access. This will be exacerbated by the impact of climate change and will affect education, traditional gender roles, sanitation, etc., and due to lack of meaningful employment opportunities, the region also exhibits a high incidence of migration. Migrants from this region are overwhelmingly male, and often women are left behind to care for themselves, their households, and particularly, the children and the elderly. Combined with decreased resource access and potential livelihood-loss from the myriad climate risks in the region, women are likely to become more vulnerable in the business-as-usual scenario. A gender assessment has been conducted and an action plan has been drawn up based on the findings, that expounds on these social and gender issues to be addressed through the project components (See Annex O). These are in line with the MedProgramme's overarching Gender Mainstreaming Strategy (Annex T).

Coastal aguifers and groundwater-related coastal wetlands

In the MedPartnership, 70 main coastal aquifers and 26 representative coastal wetlands (Figure 3) were assessed to consolidate existing knowledge and determine connections among these natural systems and human populations (Figure 4. The findings of these assessments reveal an alarming situation:

- Generalized coastal groundwater degradation contributes to exacerbating issues of transboundary concern at the LME level, such as nutrient pollution and degradation of habitat and coastal freshwater dependent ecosystems.
- Expert opinions and the existing quantitative data on coastal groundwater quality indicate a regionally preponderant medium to high level of contamination from nutrients, other hazardous substances and salinization, the latter being often attributed to seawater intrusion.
- Scientific knowledge and public awareness of coastal aquifers is scant or non-existent in most countries. Monitoring is occasional at best, and lacks modern technologies and strategic, multipurpose design.

- As a consequence, management frameworks for coastal groundwater resources are absent, and these
 resources are not formally recognized as critical for the sustainability of coastal developments, and as
 being highly vulnerable.
- Unregulated exploitation is common, and no quality-quantity safeguards exist or are applied. Conflicts among uses (agriculture, domestic, tourism, environment and energy) are common and potentially disruptive.
- In spite of the abundant scientific information on Mediterranean wetlands, and the prevalence of protection schemes, most of the wetlands are reported as having their functionality altered to different degrees. Half of the wetlands studied are moderately altered, and the other half are highly to very highly altered.
- No specific laws or policies exist in any of the countries protecting and regulating the use of coastal groundwater, considering its strategic value, its high vulnerability to contamination, and its interactions with the sea. General water laws apply, normally with little or no discrimination between surface and groundwater. The same is true for the institutional settings.



Fi ure Location t e and name of the main coastal aquifers and re resentati e etlands assessed in the Adriatic Le antine and Southern and Central asins of the Mediterranean Sea for the MedPartnershi (UN En ironment MAP and UNESCO I P 2 1)

Aquifer name Countr	Pollution from Nutrients	Pollution from other Pollutants	uman De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
AL ANIA					
Buna					
Cika					
Dukati					
Mati					

Aquifer name	Pollution from	Pollution from	uman	Lin s ith	Salini ation
Countr	Nutrients	other Pollutants	De endenc for	Ecos stems	
			Domestic Uses		
Tragiasi					
Vjosa					
ALGERIA					
Collo-Teleza					
Comp. Dunaire					
Terga					
Plaine de la					
Mitidja					
Annaba					
OSNIA AND ER	EGOVINA	_			
Trebisnjica					
Egypt					
North Nile Delta					
North Sinai					
Northwest Coast					
LE ANON					
Afka					
Beirut					
Chekka					
Damour					
South					
Tripoli					
Tyr-Saida					
Zarka					
Li A		•			
Gefara Plain					
Montenegro		•			
Boka Bay					
Bojana					
Morocco					
Bou-Areg					
Rhis-Nekkor					
Martil-Alila					
Negro					
Oued laou					
Smir					
TUNISIA					
Chegarnia-Sidi					
Abicha					
Cote Orientale					
Gabes					
Grombalia					
Mahdia					
Mornag					
Ras Jebel					
Sahel Sfax (deep)					
Sahel Sfax					
(shallow)					
Tabarka					

Aquifer name Countr	Pollution from Nutrients	Pollution from other Pollutants	uman De endenc for	Lin s ith Ecos stems	Salini ation
			Domestic Uses		
Level of concern		Very Low	Low	Medium	High

Fi ure En ironmental and socioeconomic indicators of the current state of Mediterranean coastal aquifers and indications of the associated le el of concern (UN En ironment MAP and UNESCO I P 2 1)

Coastal wetlands

The assessment of all major Mediterranean coastal wetlands carried out in the MedPartnership has confirmed that they are all to various degrees dependent on coastal groundwater resources, and that their functioning is being impaired by the deceasing water quantity and quality of the coastal aquifers feeding the wetlands.

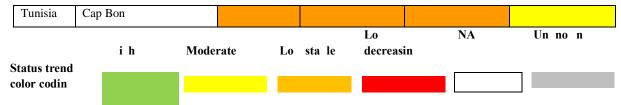
Coastal aquifers support coastal freshwater and brackish water habitats with rich biodiversity. Such habitats include coastal wetlands, which provide critical ecosystem services such as: securing health and productivity of fisheries; sustaining nursery and breeding habitats for near-shore commercial and recreational fisheries; and filtering and detoxifying by suspension feeders and submerged vegetation. They are also important resting sites for migrating birds. Degradation of coastal aquifers can heavily impact wetlands and humid areas. The threats to wetlands from aquifer mismanagement are twofold:

- The excessive use of groundwater resources from coastal aquifers can result in the drying up of the wetlands that depend upon them.
- Saline intrusion and pollution, which occur when coastal aquifers are over-exploited, and pollutants introduced into the aquifers, can degrade the health and functioning of wetlands.

The loss of the filtering functions of wetlands due to declining freshwater quality, including groundwater, is linked to the increasing occurrence of harmful algal blooms, fish kills, loss of shellfish, oxygen depletion and beach closures. Increasingly, the loss or change of vegetation in coastal ecosystems has affected these systems' ability to protect against shore erosion, coastal flooding and storm events.

Figure 5 sets forth the results of the <u>Mediterranean Wetland Assessment</u> carried out as part of MedPartnership, showing alarmingly growing pressures due in particular to groundwater extraction, urbanization, and diffuse pollution from agriculture.

Countr	Ground ater Related	Ecos stem	Ser ices Status		
	Coastal Ecos stems	Fishin	A riculture	ater Purification	Cultural Ser ices Education
Albania	Butrinti				
Algeria	Guerbes				
BiH	Hutovo Blato				
Egypt	Lake Mariut				
Lebanon	Tyre Beach				
Libya	Tawurgha Spring				
Montene	Skadarsko Lake				
gro/Alba nia	Tivatska Solila				
Morocco	Bou Areg Lagune				
	Estuaire Moulouya				
	Estuaire Oued Laou				



Fi ure Status and trends of ecos stem ser ices ro ided Mediterranean round ater related etlands (UN En ironment MAP and UNESCO I P 2 1)

Regional level policy findings and recommendations

The Barcelona Convention has been extended to address the coastal areas. The Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (LBS) and Activities deals with groundwater as a land-based source point of pollution to the Mediterranean Sea, therefore covering a limited aspect of the management of coastal aquifers. The objective in this case is the protection of the sea (as indicated in the Protocol's title) and not the proper management of the coastal aquifers as an important source of water in the coastal zone. The Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean offers protection for areas such as coastal wetlands, which often in the coastal zone depend on coastal aquifers, but does not specifically reference coastal aquifers. The Protocol on Integrated Coastal Zone Management is the one dealing the most with water resources in the coastal zone and mentions coastal aquifers as such and specifies a monitoring requirement for the Parties. However even if this progress of the consideration of coastal aquifers is to be fully acknowledged, there are still gaps to be filled. In view of raising awareness about coastal aquifers at the regional level and integrating their specificities in coastal zones management strategies and plans, the following recommendations were formulated by the MedPartnership:

- Encourage the concerned countries to deposit their instruments of ratification, acceptance, approval or accession of/to the ICZM Protocol;
- Promote the uptake of the Integrative Methodological Framework (prepared and tested in the frame of the MedPartnership project by GWP-Med, UNESCO-IHP, PAP/RAC) and its consideration of coastal aquifers in the establishment of management plans;
- Implement the Sub-regional Action Plans for Mediterranean Coastal Aquifers and Wetlands (Adriatic, and South, Central and Levantine Basins) agreed upon by the countries as part of MedPartnership.

These recommendations are at the base of the design of the present project.

2) ASELINE SCENARIO PRO ECT COUNTRIES

T E COASTAL ONE OF AL ANIA

The Albanian coastline, with a length of 380 km, consists of sandy beaches for 70 % of its total, most of them facing the Adriatic Sea (Simeoni et al., 1997). The coastal zone has a relatively low degree of occupation and coastal structures of human origin appear only close to the main ports of Shengjini, Vlore and Saranda. Coastal wetlands are present along several lagoons which cover a large part of the coastal zone and have an important function for the economy of the country due to fishing, salt extraction and other activities. Despite the fact that some form of human intervention has taken place, the evolution of the Albanian coast in recent years has not suffered from the same degree of artificialization that has affected the coastline of many other Mediterranean countries. Tourism, especially in coastal areas, is an important sector in Albania's economy and is growing. In 2016, travel and tourism accounted for 26.0% of the Gross Domestic Product (GDP) and 23.9% of total employment, and these figures are anticipated to rise to 33.0% and 31.0%, respectively, by 2027 (World Travel & Tourism Council, 2017).

Coastal ur ani ation - The percentage of built-up area in Albania within the first 10 km from the coastline increased from 0.3% in 1975 to 3.7% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 0.5% in 1975, while in 2015 it was 5.8%. Within the distance of the first 150 meters from the coastline, the percentage of built-up areas in 1975 was 0.4%, while in 2015 it was 4%. Although these percentages of the built-up areas in coastal zones are rather low, Albania has increased its land-take between 1975 and 2015 by 956% in the first 10 km, by 1,164% in the first kilometer and by 842% in the first 150 meters from the coastline. These land-take values are the highest in comparison to those of the rest of Mediterranean countries.

Le al frame or for the coastal one - Albania ratified the ICZM Protocol in 2010 which is supported by a specific No. 10234 of 18.02.2010. The Law on Territorial Planning and Development of 2014 (Law 107/2014) harmonizes Albanian territorial planning and development with European environmental standards and norms. The same law requires the drafting of sectoral plans and detailed plans for areas of national importance. However, legislation supporting ICZM or the preparation of coastal plans is still a gap. Furthermore, the landward limit of the coastal zone has yet to be defined.

Set ac - Article 84 of the 2012 law "On integrated Water Resources Management" establishes setback limits along the coast, rivers and water bodies of 100 meters and 200 meters for public use and free from developments as determined by the National Water Council.

Institutional frame or for the coastal one - The 2014 Law on Territorial Planning and Development defines responsible authorities at all levels for the territorial planning of the marine and land parts of the coast. Other regulatory duties are specified by statute. Institutions at national, local and sectoral level have a statutory role for the specific purposes of water resources management under the National Strategy for Development and Integration (NSDI II) of 2016 under the direction of the Prime Minister's Office. However, institutional arrangements and programs for the integrated management of the coast are not specified.

Inter ministerial coordination - The 2014 Law on Territorial Planning and Development and the NSDI II (2016) contain provisions for institutional coordination at national, regional and local levels. The provisions are in place for the coordinated implementation of ICZM for both terrestrial and marine parts of the coast. However, to date, implementation has been limited to regulatory actions at the local scale.

Plannin and IC M - There is currently no National Strategy for ICZM. A Coastal Zone Management Plan was developed in 1995 for the entire coastal area of Albania, and it introduced for the first time the implementation of Barcelona Convention Action Plans. However, this was not fully implemented and is now out of date. An ICZM study and plan for the southern coast of Albania was developed in 2005 and is currently under implementation. Integrated Cross-Sectional Plans for the Coast and for the Economic Zone Tirana-Durres were approved in 2016 with the ICZM methodology included. The existing strategies that include measures for management of costal zones are: The National Strategy for Development and Integration 2015-2020; the draft Cross-cutting Environmental Strategy 2015-2020 and the Document of Strategic Policies for Biodiversity Protection of 2016. These strategies, which seek to strengthen integrated policies, provide the basis for drafting a National Strategy for ICZM.

At the regional level, climate change adaptation plans for the Drini-Mati river deltas include ICZM measures, and the Buna/Bojana river basin coastal area was the subject of a transboundary Integrated Resources Management Plan (IRMP) developed under the MedPartnership (2015).

Monitorin - Article 85 of the Law 111/2012 on Integrated Management of Water Resources includes the monitoring of marine waters, surface waters, groundwaters and protected areas waters. The surface water monitoring program consists of monitoring of ecological, chemical, and microbiological parameters, as well as ecological potential and biodiversity status. According to Law No. 10 431, dated

9.6.2011 on Environmental Protection, the National Environmental Agency (NEA) is the competent authority for the management of the Environmental National Monitoring network. NEA carries out the monitoring of coastal waters on seasonal basis (four times per year) based on the analyses of physical, chemical and microbiological parameters. The Water Framework Directive is partially implemented, only for chemical monitoring. Nutrients are analyzed according to ISO 17025 and the NEA laboratory is accredited for the analyses of main chemical parameters. Monitoring of bathing waters has been carried out in Albania since 1991 (Water Quality Report, NEA, 2013) in the main beaches of Albania: Velipojë, Shëngjin, Durrës, Gjiri i Lalzit, Kavajë, Vlorë Dhërmi, Himarë, Borsh and Saranda. However, the monitoring system of coastal zone is very limited in Albania due to constraints of budget and staff time. Albania's capacity for environmental monitoring will be strengthened in the near term through its participation in the GEF project "Implementation of the Ecosystem Approach in the Adriatic Sea through Marine Spatial Planning" (the GEF Adriatic Project) which aims to align Albania's national monitoring program with the requirements of UN Environment/Mediterranean Action Plan (MAP)'s Integrated Monitoring and Assessment Program (IMAP).

Surface aters and related ecos stems - "Biodiversity-Albania" identifies the coastal lagoons or wetlands on the coast as the most significant ecosystems for the Albanian biodiversity and for their social and economic values. These ecosystems are especially important for migratory water birds. Two lagoon areas (Butrinti and Karavasta) are globally recognized Ramsar Convention wetland sites (Ramsar Sites) and are also designated as national parks. Two additional areas – Lake Shkodra and River Buna and the Prespa lakes - are also designated Ramsar Sites. The total surface area of Ramsar Sites in Albania is 98,181 hectares.

With the rapid and uncontrolled economic development over the last two decades, the quality of water resources has significantly deteriorated. The extraction of river gravel and the construction of hydropower plants have exerted great pressures on waters and riverbeds. Untreated municipal and industrial wastewater discharges are the main causes of water contamination, together with diffuse pollution of groundwaters and surface waters from nitrates and phosphates (due to excessive application of mineral fertilizers and animal manures, especially in highly erosion-prone soils).

There are three functioning municipal wastewater treatment plants in the cities of Kavaja, Pogradec and at the Rinas Airport. Municipal wastewater treatment plants have been completed in the coastal cities of Vlora, Durres, Lezha, Saranda as well as the inland city of Korca. The largest artificial reservoirs serve for hydroelectric power generation, i.e., reservoirs in a cascade above Drini, Mati and Bistrica. These reservoirs are essential to the Albanian economy. Other lakes are used for irrigation, more than 700 reservoirs with a total surface of 40 km^2 .

Large quantities of solid or liquid waste from industries, and above all mining sites and large metallurgy plants, have been dumped on riverbanks or directly into rivers in the past decades. These plants are a legacy from the former central planning economic system, and several have ceased their operation or have been rehabilitated. Nevertheless, a number of them continue to generate immense pollution hazards.

Coastal aquifers and related ecos stems - Albanian coastal aquifers (Figure 6) are relatively small (less than 300 km²) and are characterized by Quaternary alluvial deposits (porous) and carbonate deposits (karstic). The largest aquifers are located in the deltas of the Buna/Bojana (Albania/Montenegro), Mati, Erzeni and Vjosa Rivers. The aquifers present in the Dukati and Pavlla river deltas are of a limited extent, but their thickness is considerable (the Dukati aquifer's mean thickness is between 40 m and 150 m).



Fi ure 6 Main coastal aquifers in Al ania (UN En ironment MAP and UNESCO I P 2 1)

Albanian coastal aquifers are of utmost importance as they represent the only source of domestic water supplies in several urban settlements. For instance, the aquifers of Mati and Vjosa River plains ensure supplies of domestic water to populations of about 600,000 and 400,000 people, respectively.

Coastal aquifer recharge occurs through river water infiltration and precipitation. Groundwater has traditionally been used for drinking water and industrial activities, while surface water has typically been preferred for irrigation. The groundwater potential of Albania is estimated at 340 m³/s (70% of this from karstic aquifers). The mean rainfall is 1422 mm/yr, 70% of which occurs between the months of November and May.

The Buna/Bojana delta forms an extensive transboundary deltaic area of major ecological importance. The delta is among the most important natural or semi-natural wetlands in the Eastern Mediterranean and is characterized by a rich and diverse natural habitats featuring a variety of flora and fauna; a natural landscape of great value; and a unique cultural identity depicted in the landscape, historic monuments and societal practices.

The Ramsar-listed Lake Shkodra and River Buna (Albania) shared with Montenegro (Skadarsko Jezero Lake site) are recognized as groundwater-related ecosystems. An overview of the analysis of the main coastal aquifers in Albania undertaken for the MedPartnership is provided in Figure 7.

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Buna aquifer					
Cika aquifer					
Dukati aquifer					

Aquifer name	Nutrients	Other Pollutants	De endenc for	Lin s ith	Salini ation
			Domestic Uses	Ecos stems	
Mati aquifer					
Tragjasi aquifer					
Vjosa aquifer					
	Very low	Low	Medium	High	
Level of concern					

Fi ure 7 Findin s of the anal sis of the main coastal aquifers in Al ania underta en in the MedPartnershi (UN En ironment MAP and UNESCO I P 2 1)

Su marine round ater dischar es - The majority of karstic coastal aquifers (about 70%) discharge through submarine springs. The large karstic coastal aquifer of Vlore Bay (southwestern Albania) is unique in the world, as its submarine groundwater discharge (1.4 m³/s) is the main natural source of direct continental inflow in a mostly closed bay (Polemio et al., 2011). In this case, the modifications of the quality and quantity of the current coastal karstic groundwater discharge can provoke severe effects on the hydrological and ecological equilibrium of the sea and coastal areas (UNESCO, 2004). The quality of the groundwater in the Vlore Bay aquifer is generally high, due to a low degree of seawater intrusion (owing to favorable aquifer geometry and high recharge levels) and the near absence of contamination sources on the relief in which the aquifer outcrops. At the same time, the main flow paths were very rapid, which indirectly confirms the extreme vulnerability of these types of aquifers.

Polic and le al as ects of ater mana ement - Albania has undertaken efforts to transpose the fundamental principles, objectives and measures from the European Union (EU) Framework Directives to fully integrate the EU acquis into its national legislation on water resources management. A new Water Law was adopted in December 2012 and entered into force in December 2013. The new law fully complies with the provisions of the EU Water Framework Directive. An overview of the most relevant information concerning the policy and legal framework for water resources in Albania is set forth in Figure 8.

ater olicies and strate i	es						
Main rinci les and	National Strategy for Development and Integration 2014-2020:						
o jecti es	Managing rivers by basin Continue on the transit matter and action						
	Creating an electronic water cadaster						
	Integrated management of transboundary waters						
	Fully transposing the water-related EU acquis into national legislation						
	Establishing a data collection system for marine habitants, etc.						
Consideration of	None						
round ater and of							
coastal aquifers							
Le al frame or (Main r	· · · · · · · · · · · · · · · · · · ·						
ater o nershi	Law No. 111/2012, dated 15 December 2012, "On Integrated Management of Water						
	Resources":						
	All water resources are state property						
Ground ater	Law No. 111/2012, dated 15 December 2012, "On Integrated Management of Water						
consideration	Resources" provides for protection of groundwater and the implementation of plans for						
	improving its status						
	Law No. 10431, dated 9 June 2011, "On Environmental Protection" provides for water						
	protection:						
	1. Ensuring the prevention of damage to surface and groundwater quality						
	2. Improving the quality of surface waste waters waste and achieving water quality objectives						
	3. Rehabilitating contaminated groundwater						
	4. Improving the balance between the abstraction and the natural recharge of groundwater						
	5. Protection of aquatic flora and fauna						
<u>I</u>							

Law No. 8102, dated 28 March 1996 (amended with the law No. 9352, dated 3 March 2005; Law No.9584, dated 17 July 2006 and the Law No.9915, dated 12 May 2008), "On sector regulatory framework for water supply and disposal, and the treatment of wastewater ":

Establishes a regulatory framework for an independent regulatory authority responsible for water resources, water supply and disposal of wastewater processing, including surface water and groundwater resources

Law No. 9663, dated 18 December 2006, "On Concessions" regulates the procedures for granting concessions for use of natural resources, including water resources (surface water and groundwater) for hydropower; for the production, distribution and management of water for irrigation, drainage; and for the cleaning of canals and dams.

Fi ure 8 Overview of policy and legal aspects of water management in Albania (UN Environment/MAP and UNESCO-IHP, 2015)

S no sis of riorities and a s - The regulatory, strategic and institutional frameworks for sustainable development, spatial planning and the integrated management of the coast, their water resources and ecosystems are broadly in place. Progress has been made in the preparation of strategies and plans, along with the innovative Integrated Resources Management Plan for the Buna/Bojana river basin coastal area. However, the weaknesses and gaps lie primarily in effective enforcement and implementation of coastal zone management. There are significant gaps relating also to institutional capacity. ICZM expertise and centers of specialization in coastal management are inadequate. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone.

The priorities identified include:

- Adopting a national ICZM Strategy and effective ICZM-specific legislation;
- Preparing ICZM plans that are coherent in geographic scope and that contain no significant gaps;
- Connecting and coordinating water use plans with the development activities in tourism;
- Coordinating and managing water uses in the context of climate change;
- Rehabilitating damaged riverbeds;
- Assessing coastal aquifers vulnerability and the evaluating seawater intrusion risk;
- Establishing a modern monitoring network to determine the factors negatively impacting groundwater quality and implementing effective pollution prevention measures;
- Raising awareness and building capacity for successful implementation and enforcement of coastal and water laws and policies; and

Enhancing mechanisms for gender-responsive decision-making in natural resources, as these (at the current baseline) are not equipped to address the needs of both men and women equally. As a general trend, women are unable to influence these mechanisms to preserve their interests, while facing disadvantages posed by civil society and socioeconomic structures.

Rele ant UNDAF¹¹ riorities – Albania has identified "Environment and Climate Change" as one of four priorities in its UNDAF 2017 – 2021, with an associated outcome for government and non-government actors to adopt and implement innovative, gender-sensitive national and local actions for environmental sustainability, climate change mitigation and adaptation, and disaster risk reduction. Child Project 2.1 will contribute to this priority in Albania's UNDAF through activities to promote the sustainable development of the coast and its resources using ICZM instruments, and to enhance the protection and sustainable management of the country's coastal groundwater resources and their related ecosystems. The project will also respond to Albania's priorities by providing capacity building on climate change adaptation, marine spatial planning, collection of water data, the assessment of submarine groundwater discharges, and the conjunctive management of surface water and groundwater. Finally,

¹¹ United Nations Development Assistance Framework (UNDAF)

gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF ALGERIA

Algeria has a coastline of 1,280 km characterized by a geomorphological diversity under the influence of the "Algerian current" which comes from the water entries of the Atlantic. Continental inputs of fresh water at some places are very important, according to the season. The Algerian coastline is subjected to pressures of anthropogenic origin due to the presence of several large coastal metropolises, including Algiers, Oran and Annaba. Tourism is mainly seaside and predominantly national. There is diffuse tourism on large parts of the coastline, although increasingly strong concentrations are recorded at some points of the coast.

Coastal ur ani ation - The percentage of built-up areas in Algeria within the first 10 km from the coastline increased from 1.4% in 1975 to 8.6% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 3.1% in 1975, while in 2015 it was 16.3%. Within the distance of the first 150 meters from the coastline, the percentage of built-up areas in 1975 was 3.4%, while in 2015 it was 14.0%. Algeria has increased its land-take between 1975 and 2015 by 517% in the first 10 km, by 422% in the first kilometer and by 315% in the first 150 meters from the coastline.

Le al frame or for the coastal one - Algeria has not yet ratified the ICZM Protocol. Nevertheless, Algeria prepared its National ICZM Strategy which was approved in 2015. Algeria has a specific law for the coastal zone: Law 02-02 relative to the protection and the valorization of the littoral (Littoral Law). It codifies the conditions and procedures for the construction and use of the land on the coastal strip, the use of the natural areas bordering the beaches and the extension of the non-buildable area.

Set ac - The Planning and Urbanism Law sets forth special rules applicable to certain parts of the territory, particularly the coastline. This law defines a 100-meter-wide strip of land from the shore as a *non-aedificandi* easement, a "non-buildable area". However, the Law on the Protection and Development of the Coast states that it is possible, for reasons related to the sensitive nature of the coastal environment, to extend this area to a width of 300 meters. Nevertheless, because of the topographic constraints, regulations make exceptions for some activities requiring the immediate proximity of the sea. The Littoral Law limits the longitudinal extension of the urbanized perimeter of agglomerations located on the coast to three kilometers and recommends a distance of at least five kilometers between two adjacent agglomerations. It prohibits new carriageways parallel to the shoreline within 800 meters, on coastal dunes, coastal dune cords and the upper parts of beaches.

Institutional frame or for the coastal one - The National Coastal Commission (Commissariat du Littoral) is the main institution for the implementation of the Littoral Law. Its missions are to:

- Preserve and enhance the coastline, the coastal zone and the ecosystems they support;
- Protect the coastline and coastal areas by implementing the measures of applicable regulations;
- Assist local communities in all coastal-related matters under its responsibility;
- Maintain, restore and rehabilitate land and marine areas necessary for the maintenance of the natural balance, in view of their conservation;
- Promote awareness and programs of public information on the conservation and sustainable use of coastal areas and their biological diversity.

Ministries involved in the management of the coastal zone are the Ministry of the Interior of Local Authorities and Territorial Planning; the Ministry of National Defense; the Ministry of Public Works and Transportation; the Ministry of Agriculture, Rural Development and Fisheries; the Ministry of Housing, Urbanism and Town; the Ministry of Tourism and Art Craft; the Ministry of Water Resources; and the Ministry of Higher Education and Scientific Research.

Inter ministerial coordination - An inter-ministerial committee was established for the elaboration of the ICZM National Strategy for Algeria. Algeria is currently establishing a National Commission responsible for the approval of coastal development projects and coastal plans.

Plannin and IC M - The enactment of the Littoral Law in 2002 and the elaboration of the National ICZM Strategy in 2015 provided a framework for the elaboration of plans, action plans and cooperation programs. Recently, Algeria has established the "National Environment and Coastal Fund" to finance the implementation of coastal and coastal protection measures.

Monitorin - The legal framework relating to the environment has been expanded in Algeria by a series of laws and other regulatory texts. Some of the resulting provisions relate to environmental monitoring (Law No. 03-10 of 19 July 2003 on the protection of the environment in the context of sustainable development; Law. 01-19 of 12 December 2001 on the management, control and disposal of waste; Law. 02-02 of February 5, 2002 (Littoral Law), Law. 01-11 of 3 July 2001 on fisheries and aquaculture; Executive Decree No. 06-141 of 19 April 2006 defining the limit values for discharges of industrial liquid effluents; Executive Decree No. 14-264 of 22 September 2014 on the organization of the combat against marine pollution and institution of emergency plans; Executive Decree no. 07-206 of 30 June 2007 on regional planning). National capacities for monitoring and analysis are well developed among national research centers, universities, national agencies and laboratories.

In Algeria, a number of initiatives related to monitoring the marine and coastal environment have been launched:

- Inventory of biological resources
- Centralization of Habitats and Ecosystems
- Signage of Invasive Alien Species
- Mapping, monitoring and monitoring plants in Posidonia oceanica meadows in Algeria
- Health and Classification Study of Fishing and Aquaculture Zones
- National Network for the Analysis of the Quality of Aquatic Environments

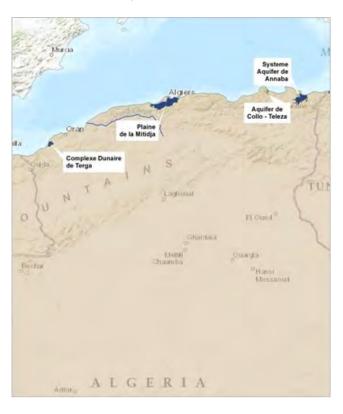
Finally, a geographical information system to monitor the state of the coastline of the 14 coastal Wilayas was recently launched and will consolidate data generated from past, ongoing and future projects.

Surface ater and related ecos stems - The only major river in Algeria flowing into the Mediterranean is the Cheliff (725 km long), which has its source in the Tell Atlas. The country has 1,451 wetlands in its territory, distributed from north to south over three million hectares, more than 1% of the country's surface. There are currently 50 Ramsar Sites in Algeria, with a total area of 2,991,013 hectares.

The availability of conventional water resources is affected by growing water demands and the deterioration of surface and groundwater quality. Moreover, climate change is further exacerbating the situation with significant impacts on weather patterns, precipitation, and the hydrological cycle, affecting surface water availability, as well as soil moisture and groundwater recharge. The climate change and dryness which occurred for several decades in Algeria have negatively affected the water resources of the country. The current situation is characterized by imbalance between the needs and the available resources. Pollution of water resources by domestic, agricultural, and industrial wastes exceeds by far the processing capacities of the available treatment systems. In April 2011, 123 sewage treatment plants were operating in the country. During that same year, the national wastewater treatment capacity was of 365 Mm³/yr, compared to a volume of discharged wastewater of 1062 Mm³/yr. The Mediterranean Hot Spots Investment Programme (MEHSIP) (2008) identified considerable pollution problems in Algeria's coastal zone (a coastal band with a width of 40 km) representing 1.8% of the country's surface and hosting approximately 12.5 million people (1998) or 45% of the country's population. Most urban effluents are discharged untreated directly into the sea. Industrial activity is also concentrated in the coastal zone and

industrial effluents are discharged into the coastal marine environment. Furthermore, petroleum hydrocarbon pollution is very common along the Algerian coastline due to the maritime oil traffic lines passing close to the Algerian coast.

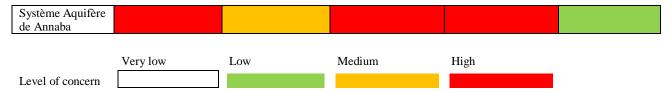
Coastal aquifers and related ecos stems - Algeria's 59 coastal aquifers (Figure 9) are characterized mainly by sand, sandy clay and gritty clay formations, and in most cases, they are in relation with a surface water body. In an average year, these coastal aquifers provide 914.5 Hm3/yr in exploitable water resources. Agriculture accounts for the dominant use of the coastal aquifers studied, with domestic and industrial activities as secondary uses. Coastal aquifers sustain several important ecosystems, including the El Mohken wetland (Plaine de Collo), and the Ramsar Sites of Lake Tonga and Lake Oubeira (Plaine d'Annaba) and also Reghaia Lake (Plaine Alluviale de La Mitidja). Average annual rainfall ranges from 400 mm in the west to more than 1200 mm in the east, with less than 100 mm near the edge of the Sahara. Algeria is considered a water-scarce country.



Fi ure 9 Main coastal aquifers in Algeria (UN Environment/MAP and UNESCO-IHP, 2015)

An overview of the analysis of the main coastal aquifers in Algeria undertaken for the MedPartnership is provided in Figure 10.

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Aquifère de Collo					
- Teleza					
Complexe					
Dunaire de Terga					
Plaine de la					
Mitidja					



Fi ure 1 Findings of the analysis of the main coastal aquifers in algeria undertaken in the Medpartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Su marine round ater dischar es No official estimates of submarine groundwater discharges from Algeria's coastal aquifer are available.

Polic and le al as ects of ater mana ement - The legal framework for the management of aquifers in Algeria seems rather complete, with a water law (Law No. 05-12 - 2005, amended and supplemented by Law No. 08-03 – 2008) including various provisions related to groundwater as well as implementation decrees on this issue. A National Water Plan (NWP) is prepared every five years. The Minister of Water Resources presents it to the Council of Ministers for approval, then it is adopted by Decree. Master Plans for Water Resources Management (PDARE) are prepared on the basis of the NWP at the level of each watershed. Besides the central administration composed of the Ministry of water resources and other ministries in charge also in the water sector, the institutional frame is composed of many national public establishments under the umbrella of the Ministry of water resources, including watershed agencies (ABH). Other national agencies are also in charge of water from different perspectives. The "National Advisory Council on Water Resources" is also established as a consultative body to examine strategic options and implementation instruments of the NWP as well as all issues relating to water for which its opinion is requested (Article 62). An overview of the most relevant information concerning the policy and legal framework for water resources in Algeria is set forth in Figure 11.

National olic and strate	for ater					
Princi les and o jecti es	The main principles of the water policy are:					
	6. Saving water through controlling leakage and water waste					
	7. Creating awareness about the rational utilization of water					
	8. Protecting water from all pollution					
	9. Universality: water is the business of all users					
	10. Research and evaluation of surface water and groundwater resources					
	It aims to:					
	Increase the mobilization of the resource					
	Rehabilitate and develop the infrastructures (drinking water and sanitation)					
	 Modernize and extend the irrigated surfaces to support the strategy for food security 					
	Ensure good water governance and improve management indicators					
Consideration of	None					
round ater and coastal						
aquifers						
Le al frame or (main ri	nci les and ro isions)					
ater o nershi	Water belongs to the public domain (Water law no. 05-12, 4 August 2005)					
Consideration of	Law no. 05-12					
round ater	Executive decree no. 10-23 of 2010 on the quantitative protection of groundwater					
	Executive decree no. 10-25 of 2010, establishing the granting modalities of a concession for					
	establishing water pumping installations (surface and groundwater) in view of ensuring an					
	autonomous supply of industrial zones or units.					
	Executive decree no. 10-317 of 2010 defining the conditions for the samples and the analyses					
	of ground and surface water resources.					
	Executive decree no. 10-318 of 2010 defining the granting modalities for concessions for using					
	water resources from fossil or slowly renewable aquifer systems					
	Executive decree no. 11-219 of 2011 defining the quality objectives of surface and groundwater					
	for drinking purposes.					
Consideration of coastal aquifers	None					

Fi ure 11 O er ie of olic and le al as ects of ater mana ement in Al eria (UN En ironment MAP and UNESCO I P 2 1)

S no sis of riorities and a s The coastal zone experiences intense pressure from human populations (281 inhabitants/km²) as well as industrial activities (51% of the country's industrial plants are located along the coast) and a growing tourism industry (9 million visitors in 2005). Rising sea levels have been observed, increasing the vulnerability of coastal aquifers to seawater intrusion. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone. Furthermore, solid waste management practices have a negative impact on the coastal zone, with 380 uncontrolled disposal sites along the coast.

The identified priorities include:

- Consolidating the institutional framework, improving its effectiveness and strengthening governance;
- Raising awareness and improving environmental communication by involving civil society to build ownership for the protection and sustainable development's measures for the coastal zones;
- Supporting the creation of a national monitoring system for coastal areas;
- Exchanging of ICZM best practices;
- Building capacity and adaptation of the education curricula according to the needs of ICZM;
- Integrating risks related to climate change in coastal zone planning;
- Optimizing the framework of international and regional cooperation in order to support national policy for preservation and protection of the coastal zone;
- Securing support for the activities of Non-Governmental Organizations (NGOs) for the protection of environment in coastal zones; and
- Identifying measures to address the challenges associated with the scarcity of water resources, but also the fragility of soils (erosion) and ecosystems, key issues identified in the National Water Plan

Rele ant UNDAF riorities – The environment and climate change figure prominently in Algeria's UNDAF 2016 – 2020, which documents the country's goal to achieve by 2020 an improved quality of life and increased resilience of its institutions and citizens, through participatory management of natural and urban ecosystems. Child Project 2.1 will support Algeria in its achievement of this goal by promoting the uptake of ICZM instruments – proven tools for enhancing sustainable development of the coast and its resources and building the resilience of people and institutions – and by providing capacity building on climate change adaptation, marine spatial planning, collection of water data, the assessment of submarine groundwater discharges, and the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF OSNIA AND ER EGOVINA

The State of Bosnia and Herzegovina (BiH) consists of two entities: the Federation of Bosnia and Herzegovina (FBiH) and the Republic of Srpska (RS). The Brcko District of Bosnia and Herzegovina (BDBiH) has been created under the exclusive sovereignty of the Bosnia and Herzegovina. BiH has 20 km of Adriatic coastline, located in an area known as the Neum corridor. The morphology of the coastline is mainly characterized by steep hills and a rocky coast with some sandy beaches. Tourism in the Neum corridor is concentrated mostly in the coastal region and is the leading contributor to the local economy.

Coastal ur ani ation - BiH has limited access to the Adriatic Sea through the 20-km wide Neum corridor. The percentage of built-up area in BiH within the first 10 km from the coastline increased from 0.2% in 1975 to 0.6% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 2.4 % in 1975, while in 2015 it was 8.1%. Within the distance of the first 150 meters from the coastline,

the percentage of built-up land in 1975 was 2.9 %, while in 2015 it was 10.5%. BiH has increased its initial land-take between 1975 and 2015 by 239% in the first 10 km, by 239% in the first kilometer and by 264%, in the first 150 meters from the coastline.

Le al frame or for the coastal one - BiH has not ratified the ICZM Protocol. No specific coastal legislation has been formulated or agreed. Legislation relevant to the coast is sectoral, including the Water Law of the FBiH, Water Management Plan for the Adriatic Sea in the FBiH, the Law on Environmental Protection; or is covered by the general regulatory duties of government bodies such as the Ministry of Agriculture, Water Management and Forestry.

Set ac - No coastal setback zone has been defined.

Institutional frame or for the coastal one - The Adriatic Sea River Basin District Agency has statutory responsibility for water quality, monitoring and water management plans. Other sectors are the responsibilities of the relevant ministries of Agriculture, Transport & Communications, Environment & Tourism, Health, cantons and municipalities.

Inter ministerial coordination - No formal mechanisms for inter-ministerial coordination have been identified.

Plannin and IC M - BiH has adopted its National Action Plan (NAP) to reduce pollution caused by land-based activities (2017), fulfilling its obligations under the LBS Protocol of the Barcelona Convention and creating conditions for financial support of future projects in this domain. BiH has various bilateral arrangements and cooperation with the Republic of Croatia, including the planning of water management relations on the protection and use of transboundary watercourses and international lakes; the agreement on joint financing of maintenance and operation of the regional drainage system; the Cooperation in Protection from Natural and Civil Disasters (2001); the GEF Adriatic Sea Environmental Pollution Control Project, etc. A spatial plan for the coastal municipality of Neum has been prepared but not adopted by the federal authority. There are no specialized research centers to further the knowledge of integrated coastal zone management or river basin management.

Monitorin - BiH's national monitoring programme is focused on the physicochemical parameters of sea water, and on contaminants, including in pollution hot spots. Although BiH is not one of the countries that will participate in the GEF Adriatic project (these are Albania and Montenegro), it will have the opportunity to exchange best practices on environmental monitoring with these countries. Furthermore, BiH will receive technical assistance in this domain from the Marine Pollution Assessment and Control Component of MAP (MED POL) to support the alignment of its national monitoring programme with IMAP, and from the Priority Actions Programme/Regional Activity Centre (PAP/RAC) through the preparation of a Coastal Area Management Programme (CAMP).

Surface aters and related ecos stems - The waters of BiH are split between the Danube River Basin District and the Adriatic Sea Basin. The Adriatic Basin covers parts on the BiH territory of the international river basins of the Neretva River, Trebišnjica, Cetina and Krka. As a result of its rich natural environment, low industrial development and relatively low anthropogenic impact, Bosnia and Herzegovina has a high level of biodiversity compared to the European average. BiH has three Ramsar Sites: Hutovo Blato, Bardača and Livanjsko polje. Hutovo Blato, a coastal ecosystem, was declared a natural park in 1995. Due to its significance for migration of large number of wetland birds, it was also listed as one of the Specially Protected Areas of Mediterranean Importance in accordance with the Barcelona Convention. The International Council for Bird Protection furthermore included Hutovo Blato on the list of internationally recognized areas of importance for birds (1998).

Overall, the water quality of the rivers of BiH is good with respect to levels of nitrates and dissolved oxygen. However, rivers located in regions with industrial installations have been observed to have high nitrate concentrations, for example the Spreča River (area around the Sava River) and the Bosna River, which is the most vulnerable to urban and industrial wastewater discharge. Inadequate treatment of wastewater is another important source of water pollution. Only some municipalities in the Adriatic Sea Basin (Trebinje and Bileća) have functioning facilities for sewage water treatment. Some progress was made in the period 2003-2009 during which the quantity of water treated annually increased with respect to total wastewater generated.

Coastal aquifers and related ecos stems - BiH has one coastal aquifer (Figure 12), the Trebišnjica aquifer, which extends into the territory of Croatia. The Trebišnjica aquifer is primarily karstic, formed in very fractured and porous limestone. The recharge of this aquifer occurs mainly through infiltration of precipitation and from sinking rivers, with infiltration rates especially high in the spring resulting from increased river flow due to melting snow. Average rainfall is approximately 1,780 mm/yr, with elevated precipitation occurring in fall and spring. Surface and groundwater regimes were altered drastically with the construction of several important dams and reservoirs during the era of the former Yugoslavia. The independent states that emerged from the former Yugoslavia are now faced with complex, transboundary water management challenges resulting from these constructed systems. These challenges have presented cooperation opportunities as evidenced in the development of joint water monitoring programs between countries in the region (i.e., Serbia, Montenegro and Croatia). An overview of the analysis of the main coastal aquifer in BiH undertaken for the MedPartnership is provided in Figure 13.



Fi ure 12 Main coastal aquifer in BiH (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Trebišnjica					
	Very low	Low	Medium	High	
Level of concern					

Fi ure 1 Findings of the analysis of the main coastal aquifer in BiH undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Su marine round ater dischar es No official estimates of submarine groundwater discharges from BiH's coastal aquifer are available.

Polic and le al as ects of ater mana ement - There is no legally binding act related to water at the state level, with the exception of the Rulebook on Health Safety of Drinking Water. In BiH, water management issues are not addressed in the Constitution so they fall under the following provision: "All governmental functions and powers not expressly assigned in this Constitution to the institutions of Bosnia and Herzegovina shall be those of the Entities" (Article III, Paragraph 3 of the Constitution of BiH). Therefore, water management issues are of the competence of the Entities, meaning FBiH and RS. The FBiH is subdivided in ten Cantons, which makes the water governance even more complex in this part of BiH. Each Canton has its own government and adopts its own laws (in accordance and fully complying with the FBiH legislation). The main functions and tasks related to water assigned to the Cantons include permitting and allocation of water resources under their competence (drainage, irrigation, water supply, hydropower, and water protection). An overview of the most relevant information concerning the policy and legal framework for water resources in BiH is set forth in Figure 14.

ater olicies and strate	e ies	
Main rinci les and o jecti es	The Development Strategy of FBiH (2010-2020) identifies water and groundwater as development factors: • Strategic goals of the strategy: • Legal and institutional reform of the water sector, • Integrating water management into the economic system, • Safeguarding the good status of surface and groundwater • Harmonization with EU acquis Water Management Strategy (FBiH) (2011) for the period 2010-2022 includes strategic objectives related to groundwater: • Strategic objective no. 1: legal reform of the water sector and alignment with the European union water acquis; • Strategic objective no. 8: achieving and maintaining good status of surface water and groundwater to protect of aquatic flora and fauna, and needs of water users Framework Plan of Development of Water Management (2006) of RS refers to groundwater in a number of objectives: • Ensuring the implementation of the EU Water Framework Directive • Defining limits of substances for surface and groundwater in protected areas • Program establishing monitoring of nitrates in surface water and groundwater • Adopting measures for preventing water contamination and protection in case of outflow in groundwater and surface water. Strategy of Integral water management of RS for the period 2014 – 2024; this is a draft version.	
Consideration of	Adopted on the basis of the Framework Plan. Special emphasis on waste water treatment plants. In all strategic and planning documents	
round ater	in an example and planning decomposite	
Le al frame or (Main rinci les and measures)		
ater o nershi	FBiH:	
	 Category I waters: FBiH is the owner Category II waters: the city or the municipality is the owner unless regulated otherwise by the Cantonal regulations 	

Ground ater	FBiH:	
consideration	•	Water Law (2006)
	•	RS:
	•	Water Law (2006, amended in 2009)
	•	BDBiH:
	•	Water Law (2004, amended in 2005 and 2007)
Coastal aquifers	None	
consideration		

Fi ure 1 O er ie of olic and le al as ects of atermana ement in i

S no sis of riorities and a s - BiH has yet to ratify the ICZM Protocol and has no legal instrument for setback or for integrated management. Legislative, planning and management measures to ensure the protection and conservation of coastal areas and marine areas are not in place. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone. Gender mainstreaming is implied but not specifically emphasized.

The identified priorities include:

- Ratifying and adopting the ICZM Protocol;
- Preparing a national ICZM strategy or equivalent plan for the coast of BiH, and transboundary cooperation;
- Strengthening mechanisms for institutional cooperation on the coast;
- Strengthening institutional capacity regarding ICZM expertise and centers of specialization in coastal management;
- Raising awareness and building capacity for successful implementation and enforcement of coastal and water laws and policies; and
- Developing formal mechanisms to provide women with enhanced opportunities to participate in decisions regarding natural resources management.

Rele ant UNDAF riorities – Sustainable and equitable development and employment are highlighted as priorities in Bosnia and Herzegovina's UNDAF 2013 – 2019. Two of the associated desired outcomes of these priorities are: (1) the enhancement and operationalization of legal and strategic frameworks to ensure sustainable management of natural, cultural and energy resources; and (2) better articulated and coordinated policies and programmes, including those focused on science. Child Project 2.1 will respond directly to the first outcome by promoting the uptake of the ICZM Protocol and related instruments which are recognized as effective tools for the sustainable development of the coast and its resources. The project will also support the second outcome by enhancing policies and programmes underpinned by science through the building of institutional capacity on climate change adaptation, marine spatial planning, collection of water data, the assessment of submarine groundwater discharges, and the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF EG PT¹²

Egypt has a coastline of about 1,150 km and is among the most populated countries of the Mediterranean region. It has a high population density in the Nile Delta zone and on the Mediterranean coast, due to the presence of important coastal cities such as Alexandria (about 4.4 million inhabitants), Port Said (630,000 inhabitants) and Marsa Matrouh (400,000 inhabitants). The anthropogenic pressure on the marine

¹² The government of Egypt will provide some updated baseline information during the inception phase of the project.

environment along the Mediterranean coast of Egypt is linked to urban development and land reclamation for agriculture and aquaculture. In addition to urban development, the Mediterranean coast of Egypt hosts 40% of the industrial activity of the country and some portions of this coast are used for domestic tourism. The coastal zone between Alexandria and Marsa Matrouh is an important area for tourism, which generates additional pressure on the marine environment from the discharge of wastewater and solid wastes.

Coastal ur ani ation - The percentage of built-up area in Egypt within the first 10 km from the coastline increased from 1.1% in 1975 to 6.7% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 3.0 % in 1975 while in 2015 it was 12.7%. Within the distance of the first 150 meters from the coastline, the percentage of built-up land in 1975 was 0.6%, while in 2015 it was 5.6%. Egypt increased its initial land-take between 1975 and 2015 by 487% in the first 10 km, by 321% in the first kilometer and by 783%, in the first 150 meters from the coastline.

Le al frame or for the coastal one - Egypt has yet to ratify the ICZM Protocol. However, a legal instrument from 1994 (amended in 2009) requires the preparation of an ICZM Strategy to comply with the Protocol, as well as environmental management of the coast zone based on the participation of all relevant parties, and the management of coastal resources to achieve sustainable development. Furthermore, the landward extent of the coastal zone is defined according to criteria ranging from 30 km in desert areas to the 3-meter contour in the Nile Delta. Governorates can set the boundary, but never less than 10 km landward.

Set ac - The legislation referred to in the previous section also prohibits construction within 200 meters of the coast without permission from the administrative authority and the High Supreme Licensing Committee.

Institutional frame or for the coastal one - The Ministry of Planning has prepared the National Strategy for Sustainable Development. The Minister of Environment oversees the National Steering Committee for ICZM. Egypt has a number of centers with ICZM expertise and responsibilities, including the Egyptian Environmental Affairs Agency Department for ICZM.

Inter ministerial coordination - The National Steering Committee for ICZM is comprised of all 16 ministers responsible for the protection and management of the coastal zone, along with NGOs, the private sector and experts. The High Supreme Licensing Committee for development comprises relevant line ministries and stakeholders.

Plannin and IC M - A draft national ICZM strategy was initiated in 2008 by the Egyptian Environmental Affairs Agency with the support of PAP/RAC. ICZM projects undertaken include those in the coastal areas of Matrouh and Sallum, Alexandria, Alexandria Lake Maryut, and the Fuka Matrouh CAMP project. The latter includes measures to facilitate women's involvement in the coastal planning process. In addition, the GEF-UNDP project "Adaptation to Climate Change in the Nile Delta Through Integrated Coastal Zone Management" 2009-2014 was developed on ICZM principles. Contingency action plans and strategies have been developed for tsunami risks, environmental disasters and oil spills. Egypt has prepared a Strategic Plan for Biodiversity to support the implementation of the CBD (2011-2020). Recently the project "Enhancing climate change adaptation in the North coast and Nile Delta Regions in Egypt" has been approved by the Green Climate Fund (GCF). Initial contacts with the implementing agencies in Egypt have been established to avoid overlapping and to promote synergies with Child Project 2.1 of the MedProgramme.

Monitorin Obligations for monitoring are set forth in two laws: Law Number 4 of 1994 promulgating the Environment Law and Law Number 102 of 1983 for Nature Protectorates. There exists, therefore, national capacities for monitoring and analysis among national institutions and organizations. Most of the

scientific monitoring initiatives undertaken to date have been within the framework of projects or academic studies covering specific sites and limited time periods. Some of these include:

- Environmental Information and Monitoring Program;
- National monitoring program for Mediterranean water from Salloum to Rafah (the most important monitoring program for the Mediterranean waters of Egypt);
- Monitoring of Important Birds Area of Egypt.

Coastal aquifers and related ecos stems - Human populations in Egypt's Mediterranean coastal area (Figure 15), rely heavily on groundwater found in three main coastal aquifer systems covering nearly 18,000 km². These main coastal aquifers are all porous in nature, varying from oolitic limestone to sandy gravel formations, in confined and semi-confined states. Agriculture accounts for the main use of these coastal aquifers, with important quantities of groundwater also extracted for domestic uses including drinking water. The average rainfall in the Mediterranean coastal zone of Egypt varies from 130 to 170 mm/yr. Egypt suffers from acute water shortage. Coastal aquifers support important ecosystems including those at Lake Burulus, Lake Bardawil, Lake Maryut, Lake Manzala and some salt flats. An overview of the analysis of the main coastal aquifers in Egypt undertaken for the MedPartnership is provided in Figure 16.



Fi ure 1 Main coastal aquifers in Egypt (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
North Nile Delta coastal aquifer					
North Sinai coastal aquifer					
North West coast					

Very low Low Medium High

Level of concern

Fi ure 16 Findings of the analysis of the main coastal aquifers in Egypt undertaken in the MedPartnership (UN

Su marine round ater dischar es Groundwater discharges from Egypt's coastal aquifers to the Mediterranean are negligible.

Environment/MAP and UNESCO-IHP, 2015)

Polic and le al as ects of ater mana ement The legal framework in Egypt for water management is composed of two laws (Law 12/1984 on irrigation and drainage, and Law 213/1984 modifying some items of the previous law) which address primarily irrigation, the dominant water use sector. A law for groundwater was drafted in 2010 but has not been adopted yet. At the institutional level, the water sector is dominated by the Ministry of Water Resources and Irrigation, which is composed of two major departments and four main authorities. An overview of the most relevant information concerning the policy and legal framework for water resources in Egypt is set forth in Figure 17.

ater olicies and strate	ies			
Main rinci les and o jecti es	The national water policy (until 2017) rests on three major pillars: 1. Increasing water use efficiency 2. Water quality protection 3. Pollution control and water supply augmentation The National Water Resources Plan Project developed water resources management and investment plans, including for groundwater resources. Its implementation depends on: 1. Development of additional water resources; 2. More efficient use of the available water resources; 3. Improvement of water quality to protect public health and the environment. The Strategy of water resources development and management in Egypt until 2050 considers major issues of concern such as scarcity of water, pollution control, securing water quality and water saving, industrial and agricultural waste disposal, protection of groundwater resources, and environmental problems of climate change. Groundwater management is one of the key issues in this strategy.			
Consideration of round ater and of coastal aquifers	Strategy of water resources development and management			
`	inci les and measures)			
ater o nershi	No information available			
Ground ater consideration	Groundwater is recognized in Law No. 48/1982 (Article 1-C) and its supplementary Decree 8/1983 (Article 1-11) as one of the categories of the water bodies in the country			
Coastal aquifers consideration	None			

Fi ure 17 Overview of policy and legal aspects of water management in Egypt (UN Environment/MAP and UNESCO-IHP, 2015)

S no sis of riorities and a s - The regulatory, strategic and institutional frameworks for sustainable development, spatial planning and the integrated management of the coast are well developed with clear mechanisms for institutional coordination. The landward limits of the coast are well defined and pre-date

the ICZM Protocol. Institutional and scientific capacity is well developed at the national level. The necessary pre-conditions are therefore mostly in place to deliver ICZM. However, the key weakness and gaps lie primarily in the lack of an up-to-date, approved national ICZM Strategy, and on-the-ground implementation and integration with water and aquifer management. The main concerns are the growing seawater intrusion into coastal aquifers from over-exploitation of groundwater for agriculture and domestic purposes (increasing demands and also inefficient irrigation and distribution systems), water logging of irrigated areas expected to exacerbate soil salinization, and pollution from leaching of sewage from unlined septic tanks. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone.

The priorities identified include ¹³:

- Ratifying the ICZM Protocol;
- Updating national legislation where necessary to fully transpose the ICZM Protocol into the national legal framework;
- Updating the National ICZM Strategy, in particular to integrate the better understanding of potential climate change impacts and its adoption;
- Preparing regional/local ICZM and coastal aquifers plans and their implementation;
- Raising awareness and building capacity for successful implementation and enforcement of coastal and water laws and policies; and
- Improving mechanisms for women's participation in integrated coastal management.

Rele ant UNDAF riorities – In its UNDAF 2013 – 2017, Egypt has placed emphasis on environmental sustainability and natural resources management, with an outcome dedicated to the strengthening of mechanisms for the sustainable management of natural resources such as land, water and ecosystems. Child Project 2.1 will assist Egypt in achieving this outcome through activities to promote the sustainable development of the coast and its resources using ICZM instruments, and to enhance the protection and sustainable management of the country's coastal groundwater resources and their related ecosystems. The project will also respond to Egypt's priorities by providing capacity building on strategies for adapting to climate change and increasing coastal resilience, the collection of water data, and approaches for the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF LE ANON

Lebanon has about 220 km of coastline, which is largely made up of sedimentary rocks, loose sands or gravel. Much of the sandy coast has been degraded by the illegal extraction of sand, which has only been brought under control since 1990. In terms of marine biodiversity, the Lebanese coast is characterized by the presence of *organogenic* platforms consisting of *vermetid* terraces, considered as natural monuments in the Mediterranean.

Coastal ur ani ation - The percentage of built-up area in Lebanon within the first 10 km from the coastline increased from 9.9% in 1975 to 21.6% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 24.2% in 1975, while in 2015 it was 46.1%. Within the distance of the first 150 meters from the coastline, the percentage of built-up land in 1975 was 14.2%, while in 2015 it was 38.3%. For both years, these represent the highest percentages of the built-up coastal zone in comparison to the rest of Mediterranean countries. Lebanon has increased its initial land-take between 1975 and 2015 by 118% in the first 10 km, by 90% in the first kilometer and by 170%, in the first 150 meters from the

¹³ The government of Egypt will provide some updated information on priorities during the inception phase of the project.

coastline.

Le al frame or for the coastal one - Lebanon ratified the ICZM Protocol in 2017, and the draft law for its implementation is currently under consideration for approval by the Council of Ministers. The National Physical Master Plan of the Lebanese Territory 2005 on Coastal Zone Assets and the urban planning laws are in place to limit linear urban expansion and protect open areas. Master plans are in place for some coastal areas.

Set ac – According to the draft law, construction is forbidden within a 200-meter zone from the highest sea level in winter; while free public access to the beach and public maritime domains are allowed under the decree 4810/1966. However, this decree has been weakened by illegal developments, subsequent exemptions and a lack of enforcement.

Institutional frame or for coastal one - A national committee coordinated and convened by the Council of Ministers is responsible for sustainable development. In addition, there is a Climate Change Coordinating Committee, led by the Ministry of Environment with focal points in the line ministries, government agencies, private sector and academic institutions. The coordination and the supervision of the management of the coastal area were attributed to the National Council of Environment in 2002. Individual ministries retain their specific mandates for the regulatory control of relevant activities on the coast.

Inter ministerial coordination - While communication and coordination relating to coastal zone management between government institutions is not currently considered comprehensive or unified, the issuing of permits in the coastal zone and the implementation of CZM projects is coordinated within the government. The coordination of activities on maritime policy is being enhanced through the establishment of a national committee for Integrated Maritime Policies under the Ministry of Public Works.

Plannin and IC M - Although there is no national strategy for ICZM, a significant amount of preliminary work is underway or has been completed in recent years, including:

- The "Integrated Management of East Mediterranean Coastlines" (IMAC) project to develop a regional strategy for North Lebanon coast. The strategy developed by the CAMP Project at the Ministry of Environment emphasizes the adoption and application of ICZM principles to achieve the sustainable development of the Lebanese coast. This has potential for national application.
- The project "Environmental Resources Monitoring in Lebanon" (2011-2013) (UNEP and UNDP), which includes monitoring and identifying sensitive biological, cultural and socio-economic priorities for the coastal zone, along with a legal overview related to the coastal zone.
- The project "Supporting the management of important marine habitats and species in Lebanon" (2010-2012) with the objective to build Lebanon's Marine Protected Areas Strategy with the support of the International Union for Conservation of Nature (IUCN).

Monitorin - The legal requirements for environmental monitoring in Lebanon are set forth in the following regulations: The Law on the Environment (Law 444/2002) of 29/07/2002; Decree 8213 of 24/05/2012 relating to the Strategic Environmental Assessment; and Decree 8633 of 16/08/2012 on Environmental Impact Assessments. There are therefore organizations with the capacity to carry out monitoring activities, including universities, national institutions, the National Council for Scientific Research, the National Marine Science Center, and NGOs.

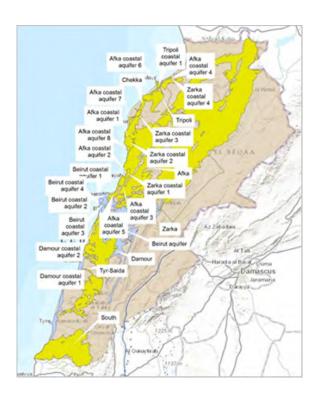
Lebanon's National Marine Science Center has been monitoring the marine and coastal environment for thirty years through a network of about thirty stations along the Lebanese coast measuring physical, chemical and bacteriological parameters. Ongoing monitoring programs include the following:

- Lebanese coastal waters observation network (permanent surveillance);
- Monitoring of oil contamination on the environment of the Lebanese Sea;
- Monitoring cetaceans in Lebanese waters;
- Assessment of stocks of species of interest for fishing.

Surface ater and related ecos stems The net available surface water is estimated at about 2,700 Mm³ per year (estimates from the 1960s and 1970s). Most of the surface water used for supply comes from captured spring sources. Their total yearly yield exceeds 1,200 million m³ (but less than 200 million m³ during the summer period). The total annual exploited volume is 637 million m³. Lebanon also has a number of freshwater marine springs. Sixteen perennial rivers and 23 seasonal rivers exist in the country, with a total annual river flow of about 3,900 Mm³, of which an estimated 700 Mm³ flow into neighboring countries. Rivers and streams are among the sites protected by decisions from the relevant authorities. Permitting standards are given for the construction and operation of facilities within a 500-meter protection radius (buffer zone). Other conservation legislation derives from international conventions including the 1971 Ramsar Convention. The most significant wetland in Lebanon is located in Ammiq, just north of the Qaroun Lake, and covers up to 250 hectares during the wet season. It supports a dynamic ecosystem and lies on one of the most important bird migration routes in the world. Other wetlands include the Yammouneh Lake in north Bekaa (most of which was drained) and Hima Kfar Zabad in West Bekaa.

Coastal aquifers and related ecos stems - Coastal aquifers in Lebanon (Figure 18), are mainly karstic in nature, and groundwater satisfies nearly 45% of the country's total water needs. In 2005, water withdrawal by sector was distributed among agriculture (60%), domestic uses (29%) and industry (11%). This trend is generally reflected in the consumption of groundwater from coastal aquifers, though some aquifers are exploited primarily for either industry or domestic uses. At present, there are limited monitoring networks for groundwater levels but none for groundwater quality. Annual precipitation on the coastal plain ranges from 600 mm to 1,000 mm.

Together, high coastal population density (greater than 1,500 inhabitants per km²) and a heavy reliance on groundwater exert significant pressures on coastal aquifers. Seawater intrusion is the most common quality problem in coastal aquifers resulting from over-exploitation of groundwater. Agriculture is the main pressure driver for several risks associated with coastal aquifers, including salinization, nitrification and yield reduction. Industrial activities have also introduced heavy metals, organic compounds and hydrocarbons into some aquifers. An overview of the analysis of the main coastal aquifers in Lebanon undertaken for the MedPartnership is provided in Figure 19.



Fi ure 18 Main coastal aquifers in Lebanon (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Afka					
Beirut					
Chekka					
Damour					
South					
Tripoli					
Tyr-Saida					
Zarka					
	Very low	Low	Medium	High	

Level of concern

Fi ure 19 Findings of the analysis of the main coastal aquifers in Lebanon undertaken in the MedPartnership

(UNEnvironment/MAP and UNESCO-IHP, 2015)

Su marine round ater dischar es It is estimated that coastal aquifers in Lebanon discharge about 0.4 billion m³ of groundwater to the Mediterranean Sea each year.

Polic and le al as ects of ater mana ement Lebanon has undertaken a major reform of the institutional framework for its water sector with the adoption of law no. 221/2000. From the legal perspective, there is no comprehensive water law as such, but rather scatted texts, some of them dating back to the Ottoman period (provisions from the Mejelle 1875) and French mandate (1925 & 1926). The

Water Code, for which drafting starting in 2003, was recently adopted (2018). Overall, the legislation is fragmented with weak enforcement. An overview of the most relevant information concerning the policy and legal framework for water resources in Lebanon is set forth in Figure 20.

Water policies and strategies							
Main rinci les	The National Water Sector Strategy (2010-2018) is composed of three documents:						
and o jecti es	1. Baseline for the Strategy (September 2010)						
	2. Forecasts for water supply and demand (November 2010)						
	3. Investment plan for the period 2011-2015 (December 2010), with four pillars:						
	i. Institutional reforms as defined by Law no. 221/2000, amended by Law no. 241 (of 7 August 2000) and Law no. 377 (14 December 2001).						
	ii. Improve the financial performance of the sector: participation of the private sector, and establishment of more rational tariffs.						
	iii. Adopt the water law and develop the legal framework for the national Strategy						
	iv. Include environmental concerns in the water sector such as protection of the water resources and of the recharge zones.						
	The implementation of the National Strategy is compromised by the political situation in Lebanon.						
Consideration of	The plan recognizes the need of a global approach with elements of Integrated Water Resources						
round ater and of	Management (IWRM).						
coastal aquifers	Lebanon ratified the ICZM Protocol (decree No. 639 dated 18/9/2014).						
Legal framework (Main prin							
ater o nershi	Water (including groundwater) is a public property with the exception of the acquired rights (Order n°144/S 1925)						
Ground ater	Decree n°14438 (2 May 1970) organizing the exploration and use of groundwater.						
consideration	Ministerial order n°118 (13 September 2010) defines the administrative procedure for the						
	permits.						
Coastal aquifers	The ICZM Protocol ratified (Decree No. 639 dated 18/9/2014).						
consideration							

Fi ure 2 Overview of policy and legal aspects of water management in Lebanon (UN Environment/MAP and UNESCO-IHP, 2015)

Su marine round ater dischar es - Along the coast of Lebanon, major submarine groundwater discharges (SGDs) have been observed since antiquity. One of the 17 freshwater submarine springs in the Chekka Bay in North Lebanon is presumed to be the largest in the Mediterranean Sea, with a peak flow six to seven times greater than the flow of the Litani River (the largest in Lebanon) during the low-flow periods (Todd 1967). The main reasons for the SGDs into the sea along the Lebanese marine environment are (1) the highly karstic and fractured (i.e., highly permeable) rock formations that are genetically connected with faults and karstic routes extending from the land into the sea, and (2) the prevailing seaward-sloping rock strata (Shaban et al., 2005).

S no sis of riorities and a s - The regulatory, strategic and institutional frameworks for sustainable development, climate change, spatial planning and the integrated management of the coast are broadly in place and reasonably well developed. The weaknesses and gaps in ICZM in Lebanon lie primarily in the lack of a strategic context involving full consideration of coastal groundwater, impacts from upstream activities and ecosystem health, and effective coordination and enforcement. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone.

The priorities identified include:

- Developing ICZM-specific legislation to implement the Protocol;
- Preparing a comprehensive national strategy for ICZM;
- Creating a coastal management unit and strengthening of ICZM expertise and centers of specialization in coastal management;

- Establishing of a coherent ICZM strategies and plans at local levels;
- Raising awareness as an important prerequisite for successful implementation of coastal and water laws and policies;
- Dedicating additional resources to environmental monitoring and technical assistance for monitoring of coastal indicators; and
- Improving mechanisms for women's participation in integrated coastal management

Rele ant UNDAF riorities – One of the core priorities of Lebanon's UNDAF 2017 – 2020 is to reduce poverty and promote sustainable development, while addressing the country's immediate needs in a manner that is sensitive to human rights and gender issues. Outcomes corresponding to this priority include the protection of forests, land and water ecosystems; improvement of water quality and reduction of water pollution; and protection of coastal zones. The activities of Child Project 2.1 will contribute to these outcomes through activities to promote the sustainable development of the coast and its resources using ICZM instruments, and to enhance the protection and sustainable management of coastal groundwater resources and their related ecosystems. Further contributions to the UNDAF in Lebanon will be achieved through the building of institutional capacity on climate change adaptation, marine spatial planning, collection of water data, and the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF LI A

The Mediterranean coast and the Sahara Desert are Libya's most prominent natural features. Libya has the longest Mediterranean coastline (1,770 km) and is home to many unspoiled beaches. Seventy-five percent of Libya's population is concentrated in 1.5% of the total area of the country in two main coastal areas: 54% in the western coastal area (Jafara Plain and Misratha area) and 21% in the eastern coastal area (Al Jabalal Akhbar) (FAO, 2005). Libya's coastal zone also features several protected natural areas which sustain the country's biodiversity. These include national parks, four protected areas, one nature reserve, four Important Bird Areas, and two Ramsar Sites, both of which are part of the Kouf National Park (an important wetland for migratory and resident water birds).

Coastal ur ani ation - The percentage of built-up area in Libya within the first 10 km from the coastline increased from 3.2% in 1975 to 5.5% in 2015, the second lowest percentage of all Mediterranean countries (UN Environment-GRID, 2017). In the first kilometer, this percentage was 5.1% in 1975, while in 2015 it was 8.8%. Within the first 150 meters from the coastline, the percentage of built-up land in 1975 was 2.2%, while in 2015 it was 5.3%. Libya has increased its initial land-take between 1975 and 2015 by 75% in the first 10 km, by 73% in the first kilometer and by 141% in the first 150 meters from the coastline.

Le al frame or for the coastal one - Libya has not yet ratified the ICZM Protocol but some existing laws are in place to protect the coastal zone's natural, archaeological, historical and tourist resources, and to prevent littoral urbanization. Libya has a wide range of well-established conservation legislation dating back to the 1940s to protect natural resources such as forests and "green areas", to establish national parks and to prevent pollution. The Ministry of Local Government /Department of Urban Planning apply Planning policies (Law 3 of 2001) concerning urban planning and executive regulation of the law, land use and classification regulation. A technical committee evaluates investment projects (under supervision of the Investment Promotion Authority) especially near the coast, for example tourism activities, power stations, sea ports, and new urban areas. Proposals for these types of activities must be accompanied by an environmental impact assessment and are subject to approval by Libya's Environment General Authority and related parties. Proposals for tourism development must also provide an assessment of the area's tourism carrying capacity to demonstrate how tourism will impact natural resources and how these resources will be preserved for future generations.

Set ac - According to regulations governing Libya's urban planning law, a 100-meter setback zone for development is required. However, there are exceptions for certain activities, such as tourism.

Institutional frame or for coastal one - Several institutions share the responsibility for economic development and natural resource use in the coastal zone. The Ministry of Planning heads a National Committee for Sustainable Development which brings together relevant ministries and experts. The Ministry of Local Government/Urban Planning applies planning policies. The Environmental General Authority is the body responsible for environmental monitoring, implementation and enforcement. The General Water Authority is responsible for water resources management including aquifers and coastal waters. Libya has no specialized research center dedicated to ICZM. The Ministry of Social Affairs is mandated to promote women's rights related to education, work, and status, and they report that there are no legal obstacles to women's participation in any particular field.

Inter ministerial coordination - Several ministries coordinate economic development activities through the National Committee for Sustainable Development, however, there is no mechanism for interministerial coordination for ICZM.

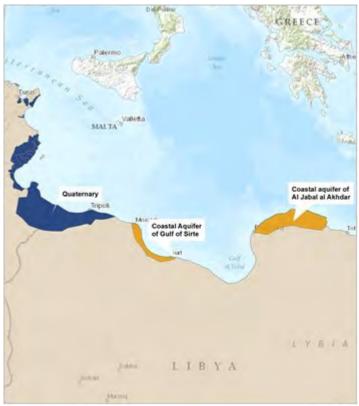
Plannin and IC M - Currently, preparations are underway for the ratification of the ICZM Protocol and the assessment of the requirements to update and transpose its Articles into domestic legislation. Libya does not currently define its coastal zone in the same terms as the ICZM Protocol. The Environment General Authority is currently leading the preparation of a national project to adopt the ICZM Protocol and to prepare a national strategy in coordination with PAP/RAC. Furthermore, the law relating to the protection and improvement of the environment is being updated and revised to incorporate the requirements of the ICZM Protocol, the Barcelona Convention and other international conventions. Libya has cooperation agreements with riparian countries for the joint management of their shared transboundary water basins (Northern Western Sahara Aquifer System, Nubian Aquifer, Lake Chad), which include provisions for technical and institutional coordination. A national strategy for sustainable development was prepared in 2008 but has not yet been implemented. Similarly, a national committee for climate change has been formed but no national report or adaptation plan has been prepared.

Monitorin – There are no structured environmental monitoring systems in place in Libya.

Surface aters and related ecos stems Libya's water supplies come from four sources: groundwater (95%); surface water, including rainwater and water stored in reservoirs (about 2%); desalinated seawater (about 2%); and wastewater recycling (about 1%). The surface water resources in the northern regions of the country have been mobilized to a certain extent by the construction of dams. On average, the total amount of surface water available in a given year is 60 Mm³ while the country's dams have been designed for a total storage capacity of 389 Mm³. Libya has two Ramsar Sites, with a total surface area of 83 hectares.

The population of Libya is unevenly distributed and concentrated in the fertile land and zones of industrial activities along the Mediterranean coastline, resulting in considerable water supply deficits in these areas. In the 1960s, Libya turned to desalination as an additional source of water, eventually becoming one of the largest users of both thermal and membrane desalination technologies in the Mediterranean region. Libya also had 79 wastewater treatment plants in 2010 with a total capacity of 74 Mm³, all of which were designed to produce effluents suitable for irrigation. However, out of the 504 Mm³ municipal wastewater produced in 2012, only 40 Mm³ were treated and directly used in irrigation on 2,900 hectares. In rural areas people depend to a large extent on private water supply wells, rainwater reservoirs, and springs. A large number of industries, such as the chemical, petrochemical, steel, textile and power generation industries, depend on private sources for water supply, including from the desalination of seawater.

Coastal aquifers and related ecos stems - Groundwater supplies 95% of the water used in Libya (Figure 21). Forty percent of Libya's population is located in the Jafara Plain, in an area that represents 1% of the country's surface area. The coastal aquifer system in this area is composed of a shallow unconfined aquifer with Mio-Quaternary deposits and dolomitic limestone, and a deep, confined aquifer of Miocene deposits. The shallow coastal aquifer provides most of the irrigation and domestic water in the Jafara Plain. Other coastal aquifers of note include the Gulf of Sirte aquifer and the Jabal al Akhdar aquifer. The Gulf of Sirte aquifer, though large in extent, has a very small exploitation due to its highly saline groundwater. The Jabal al Akhdar aquifer is used primarily for irrigated agriculture and is monitored for groundwater levels and water quality. Rainfall is less than 100 mm per year in 93% of Libya's land surface; arable regions — such as Jabal al Akhdar zone of Cyrenaica and the Jafara Plain — receive between 250 mm and 600 mm per year.



Fi ure 21 Main coastal aquifers in Libya (UN Environment/MAP and UNESCO-IHP, 2015)

Intense exploitation has led to seawater intrusion in most coastal aquifers. In the Jafara Plain aquifer, inflow from the sea was estimated at 166 Mm³/yr. Irrigation water with increased salinity levels has led to problems with soil salinization and serious effects on the citrus crops in the coastal zone. Furthermore, the water distribution systems are experiencing problems with corrosion to metallic components (e.g. pipes and taps) from increasingly saline water, resulting in increased maintenance costs and potential health hazards from dissolved metals. Pollution problems stemming from unlined septic tanks have also been documented. An overview of the analysis of the main coastal aquifers in Libya undertaken for the MedPartnership is provided in Figure 22¹⁴.

¹⁴ While three main coastal aquifers were identified in the inventory prepared by UNESCO-IHP in the MedPartnership, it was only possible to obtain detailed information on one of these aquifers, the coastal aquifer of the Jafara Plain (North West Libya/Quaternary).

Aquifer name	Nutrients	Other Pollutants	De endenc for	Lin s ith	Salini ation
North West Libya (Jafara Plain)			Domestic Uses	Ecos stems	
Level of concern	Very low	Low	Medium	High	

Fi ure 22 Findings of the analysis of the main coastal aquifers in Libya undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Su marine round ater dischar es While submarine groundwater discharges from Libya's karstic coastal aquifers are thought to be appreciable, no official statistics could be identified.

Polic and le al as ects of ater mana ement - Libya had adopted a comprehensive Water Code (1982); complemented by various legislations related to water resources such the Environmental Protection Law (2003) and various Decrees and Decisions by the Council of Ministers. Strong attention is given to water abstraction in specific coastal areas, with severe limitations, or even banning. An overview of the most relevant information concerning the legal framework for water resources in Libya is set forth in Figure 23.

ater olicies and strate i	ies ater resources strate 2 2 2
Main rinci les and	Objectives:
o jecti es	Reduce the deficit in the water budget
	Prevent water quality deterioration
	Strategy components: Minimize the water budget deficit Develop conventional and non-conventional water resources Protect water resources from pollution Recover the costs of providing water Develop human and institutional capacities
	Improve and strengthen water legislation
	Promote technical cooperation in the fields of water resources management
Consideration of round ater and of coastal aquifers	Groundwater represents 95% of total water use in Libya. It occurs in renewable coastal aquifers in the north and in large non-renewable aquifers in the southern and central basins. In 2006, extraction from coastal aquifers amounted to 1,673 Mm ³ or 34% of total groundwater extraction. The strategy therefore emphasizes the importance of the protection of the coastal aquifers by reducing their water budget deficit through inter-basin water transfer from the south and development of non-conventional resources such as desalination and treated wastewater.
Le al frame or (Main 1	rinci les and measures)
ater o nershi	Water is a public ownership (Law No. 3 of 1982 Water Code)
Ground ater consideration	Law No. 3 of 1982 Water Code
Coastal aquifers consideration	 Decree No. 791 for the year 1982: Covering additional water demand for existing or new projects within the Jafara Plain and the western coastal belt by extracting additional water from the first aquifer is prohibited Drilling new or substitute water wells in the Jafara Plain is prohibited The Benghazi plain area is put under "restricted water use" and drilling new production wells in the northern part of the Benghazi plain is prohibited The first aquifer in the area between Khoms and Misurata is put under absolute ban for additional groundwater abstraction The El-Marj Plain area is put under "absolute ban" for additional groundwater abstraction Seawater intrusion (coastal aquifers) is given a special attention in Article 41 of the environmental protection law which pointed the cautious use of aquifers to ensure no intrusion of seawater or water from other formations of higher salinity or lower quality. Article 4 of Decision No. 791 of 1982 necessitates the application of collective irrigation in

areas experiencing water shortages as a result of continuing decline of the water table in the first aquifer, as well as in areas with signs of seawater intrusion.

Article 5 on the regulations for domestic water exploitation states that:

- 1. It is not allowed to pump additional groundwater in excess of current rates to cover domestic use for coastal cities all along the coastline.
- 2. Necessary measures must be taken to assess the current and future demand for domestic water use in coastal cities through the establishment of desalination plants.

Article 6 on the regulations for industrial water exploitation states that water requirements of industrial projects shall be met through seawater desalination or from deep aquifers either directly or after treatment, if necessary.

Fi ure 2 Overview of policy and legal aspects of water management in Libya (UN Environment/MAP and UNESCO-IHP, 2015)

S no sis of riorities and a s - According to MEHSIP (2008), the major environmental concerns in Libya are water availability in general and the depletion of groundwater in particular, as a result of overuse in agricultural developments, causing seawater intrusion in coastal aquifers. Another significant environmental problem is water pollution on the coastal environment from the combined impact of sewage, oil by-products, and industrial waste. Pollution resulting from human activities occurs mainly near large coastal cities and is concentrated on rather few urban/industrial areas on the coast. Assessment of the Libyan coastal environment revealed that the main sources of pollution are urban and industrial sewage, in addition to improper solid waste management.

The development of ICZM in Libya is limited. However, there some efforts have been taken to support the ratification and adoption of the ICZM Protocol along with the development of national strategies for sustainable development and climate change adaptation. Institutional and research capacity in these disciplines remains limited. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone.

The priorities identified include:

- Ratifying the ICZM Protocol;
- Updating national legislation where necessary to fully transpose the ICZM Protocol into the national legal framework;
- Preparing a national ICZM Strategy incorporating climate change adaptation, and its implementation;
- Raising awareness and building capacity needed for successful implementation and enforcement of coastal and water laws and policies;
- Technical assistance for monitoring of coastal indicators; and
- Support for the management of transboundary groundwaters with neighboring states.

Rele ant UNDAF riorities – In its Strategic Framework 2013 – 2014, the United Nations Team in Libya identified the conservation of natural resources (including water) as a national objective contributing to the agricultural sector. Child Project 2.1 will strengthen the capacity of institutions in Libya to assess and sustainably manage coastal groundwater resources and to implement approaches for the conjunctive management of surface water and groundwater, thus contributing to increased water security in the country. Furthermore, the project will promote uptake of ICZM instruments as an effective tool to assist Libya in the sustainable development of the coast and its resources, thereby also contributing to the country's goal to achieve economic recovery. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF MONTENEGRO

Montenegro's coastline extends along 294 km of the Adriatic Sea. A prominent element of its coast is a submerged river canyon known as the Bay of Kotor. The major rivers of Montenegro include the Drina, Tara and Lim. Montenegro's largest lake is Lake Skadar (shared with Albania). The coastal area is relatively well developed and is the most densely populated region of Montenegro. Tourism is the country's key economic sector, and accounts for 15% of Montenegro's GDP and 15% of its total employment, predominately in the coastal zone. Other sectors where substantial growth can be expected are maritime transport (with related development of port facilities), industry and agriculture. Zones of local importance for industrial development are smaller locations in Tivat, Sutorinsko (Herceg Novi) and Ulcinjsko field. Two or three regional/municipal landfills are planned in the coastal zone.

Coastal ur ani ation - The percentage of built-up area in Montenegro within the first 10 km from the coastline increased from 1.3% in 1975 to 3.3% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 4.9% in 1975, while in 2015 it was 11.3%. Within the distance of the first 150 meters from the coastline, the percentage of built-up land in 1975 was 4.9%, while in 2015 it was 14.1%. Montenegro has increased its initial land-take between 1975 and 2015 by 154% in the first 10 km, by 130% in the first kilometer and by 187% in the first 150 meters from the coastline.

Le al frame or for the coastal one Montenegro ratified the ICZM Protocol and adopted it as an integral part of the national legal system with precedence over national legislation. However, the detailed provisions of the ICZM Protocol have yet to be fully transposed into domestic law (such as the new Law on the Maritime Domain, etc). The Coastal Area Spatial Plan, adopted in 2018, defines the coastal region that includes in addition to the land part defined by the Law on regional development (including the territories of six coastal municipalities), also the territorial sea and exclusive economic zone as defined by the Law on the Sea. The new Law on the Maritime Domain for the protection and sustainable management of the maritime domain and coastal strip is also in the process of preparation for adoption. Furthermore, Montenegro is a candidate country for membership in the EU and its Negotiation Position for Chapter 27 – Environment and Climate Change was adopted by the Montenegrin Government in February 2018. It is expected that the Chapter will be opened by the end of 2018.

Set ac - The existing spatial planning legislation stipulates that no residential or other development shall be constructed within 100 meters from the coastline in undeveloped coastal areas. The comprehensive establishment of the coastal setback is now in effect, following the adoption of the Special Purpose Spatial Plan for the Coastal Area of Montenegro in 2018.

Institutional frame or - The Ministry for Sustainable Development and Tourism, Directorate for Climate Change and Mediterranean Affairs is the competent entity for the implementation of the National Strategy for ICZM, including the coordination of relevant activities. The relevant national entities with responsibilities for the ICZM Protocol implementation include the Ministry for Sustainable Development and Tourism, the Ministry of Agriculture and Rural Development, the Ministries of Culture, Transport and Maritime Affairs, the Agency for Protection of Nature and Environment, the Public Enterprise for Coastal Zone Management, and local governments of coastal municipalities.

Inter ministerial coordination - Coordination is organized at the political level through the National Council for Sustainable Development, Climate Change and ICZM. The Council includes ministerial representatives, institutes' and public enterprise directors, local government presidents, private sector, NGO and trade union representatives, along with independent experts and academia. Further, a Coordination Body for ICZM acts as the expert body for the National Council to provide a forum for debate and technical advice.

Plannin and IC M - In line with the ICZM Protocol requirements, Montenegro adopted the National Strategy for ICZM in 2015. The Strategy provides a framework to protect natural, landscape and cultural assets, and to harmonize spatial and development plans and inter-sectoral activities up to 2030. The

Strategy's Action Plan includes measures and priority actions in a five-year implementation period up to 2020. The ICZM Strategy was prepared through the Coastal Area Management Program Montenegro (CAMP MNE), under the Memorandum of Understanding between the Government of Montenegro and UN Environment. Other CAMP MNE activities include coastal Vulnerability Assessments (2102 & 2013) for erosion, seismic hazard and climate change. The Action Plan for the ICZM Strategy includes the establishment of risk management systems for natural and anthropogenic hazards, along with the reporting of the state of the coastal zone, monitoring coastal processes, and the development of resource use management plans and programs. Short to medium term priority actions and project fiches include:

- Operational actions to resolve urgent targeted problems;
- Systemic actions to stimulate changes in the way systems functions;
- Demonstration actions to serve as models or as means for transferring positive experiences.

The Integrated Resources Management Plan (IRMP) for the Buna/Bojana area (2015), prepared under the MedPartnership, covers the coastal transboundary area of Montenegro and Albania.

Monitorin The Agency for Nature and Environmental Protection is responsible for Montenegro's monitoring program, under supervision of the Ministry for Sustainable Development and Tourism. Like Albania, Montenegro will also take steps to strengthen its environmental monitoring systems through its participation in the GEF Adriatic Project, which aims to align the national monitoring systems of both countries with the requirements of IMAP. Furthermore, the Montenegrin institutions responsible for environmental monitoring have participated in TAIEX (Technical Assistance and Information Exchange instrument of the European Commission) expert missions and workshops organized recently to begin the process of transposing the requirements of the Marine Strategy Framework Directive into the country's national legal and policy framework.

Surface aters and related ecos stems - The distribution and abundance of water resources vary significantly in Montenegro. Generally speaking, with an average annual runoff of 624 m³/s (i.e. 19.67 billion m³ per year), the territory of Montenegro is among the world's water rich countries. The Adriatic Sea water basin in Montenegro has an area of 6,268 km² (45 % of the country's territory) and an average runoff of 11.814×10^6 m³/year. Montenegro has more than 20 large lakes, of which six are glacial. Of these, the most significant is Lake Skadar, a transboundary water body that Montenegro shares with Albania. Several other water courses and water bodies are shared with the neighboring countries. Since 2006, Montenegro has been a party to the Ramsar Convention and presently has two Ramsar Sites: Lake Skadar and Tivat Saline, with a combined area of 20,150 hectares. For many years, the devastation of riverbeds in Montenegro and the surrounding areas due to the Illegal exploitation of gravel and sand from river basins has been a major ecological, economic and aesthetic issue. This has led to the meandering of rivers and the creation of an unnatural landscape - huge craters from which materials were extracted and dumps of barren materials left in the riverbed and on the banks. As all concession acts for exploitation of sand and gravel expired in 2016, the Ministry of Agriculture and Rural Development adopted a decision in 2017 to temporarily ban further exploitation of sand and gravel from all rivers in Montenegro. Subsequently, the Operational Working Group was established to monitor all illegal activities, while in parallel all necessary technical and research activities will be conducted to assess extraction capacities and implement extraction activities according to new data. Currently floods occur primarily due to the country's torrential hydrological regimen, triggered by the fact that about 94% of the territory has a slope above 5 percent. Therefore, floods potentially threaten 250 km² of farmland and urban zones and this is particularly pronounced in some areas surrounding Lake Skadar and Bojana River, Zeta and Bjelopavlici plains, Plav ravine and the Lim, Tara, Cehotina, Morača and Ibar river valleys. The need for flood protection measures is particularly evident in the large flat karst plain areas (e.g. Barsko, Cetinjsko and the groves of the Matica valley). Most of the constructed drainage systems are not in operation, in general due to insufficient maintenance.

Coastal aquifers and related ecos stems - Montenegro has two coastal aquifers (Figure 24), the Bojana aquifer, which extends into the territory of Albania, and the Boka Bay aquifer. Along the coast, the Bojana aquifer is characterized by alluvial deposits, while further inland it is karstic in nature. It is primarily used for domestic activities including the supply of drinking water, though it also ensures an important supply of water for irrigation. The Boka Bay aquifer is another important coastal aquifer, supplying water to the municipalities of Kotor, Tivat, Herceg Novi and also sustaining the Tivatska solila wetland. Precipitation in Montenegro's south-western coastal zone ranges from 1,500 to 2,000 mm/yr, while in the north eastern mountain ranges of Orjen, Lovéen and Rumija it is typically over 3,000 mm/yr. Seawater intrusion is the major problem facing the coastal aquifer in Montenegro. While some degree of salinization is natural in origin, most elevated salinity levels are the result of seawater intrusion. This is caused by increased abstractions in the coastal area to supply water to growing coastal populations that include a significant number of tourists in summer months. Groundwater extraction rates are at their highest during these dry summer months when there is decreased aquifer recharge from precipitation, resulting in significant lowering of groundwater levels (for example in the Bojana aquifer) and consequently an increase in the occurrence of seawater intrusion.

Demands for water in the coastal zone are increasing and are estimated to reach 68 Mm³/yr by 2021, while the estimated available reserves of groundwater in the coastal zone by this date are estimated at 256 Mm³/yr. Significant threats to the quality of coastal groundwater include the discharge of untreated domestic wastewater through submarine outfalls and unchecked urban development for the tourism industry. An overview of the analysis of the main coastal aquifers in Montenegro undertaken for the MedPartnership is provided in Figure 25.

Su marine round ater dischar es - It is estimated that coastal aquifers in Montenegro discharge approximately 2,511 Mm³/yr to the Adriatic.

Polic and le al as ects of ater mana ement - In the preparation of the Water Law (Official Gazette of the Republic of Montenegro, No. 27/2007) an effort was made to harmonize its provisions with the EU Water Framework Directive 2000/60/EC (WFD). Preparation of by-laws for the implementation of the Law and for further transposition of relevant EU Directives such as the Groundwater Directives (2006/118/EC), Bathing Waters (2006/7/EC), Nitrates Directive (91/676/EEC), and others are underway. An overview of the most relevant information concerning the legal framework for water resources in Montenegro is set forth in Figure 26.



Fi ure 2 Main coastal aquifers in Montenegro (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Boka bay aquifer					
Bojana aquifer					
	Very low	Low	Medium	High	
Level of concern					

Fi ure 2 Findings of the analysis of the main coastal aquifers in Montenegro undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

ater olicies and strate ies Main rinci les and The Water Basis (2001) contains the description of the status of water and water management o jecti es facilities according to individual areas, the conditions for maintenance and development of water resources to ensure the most advantageous and the most expedient technical, economic and environmental solutions for uniform water management, protection from adverse effects of water, protection of waters against pollution and the water use. The Strategy for water management of Montenegro (2017) sets the basis for the water sector reforms which will be implemented in order fulfill the necessary standards in water management, including organizational adjustments and systemic strengthening of professional and institutional capacities at the national and local level. Strategic commitments and goals set in this document constitute the basis for the development of water management plans. At the same time, it sets the frameworks that must be respected in the development of strategies and plans for spatial planning, environmental protection and other areas that are water-dependent or produce impacts on water. The National Strategy for Sustainable Development until 2030 (NSSD 2030) adopted in 2016 fully integrated the UN 2030 Agenda for Sustainable Development. The NSSD offers an answer

	T		
to unsustainable development trends (e.g., use of mineral resources, forests, water, resources,); institutional framework that does not comply with the requirements implementation of the policy of sustainable development and the requirements of governance and the noncompliance of real actions with the expressed political sup official commitments. It defines guidelines for aligning the conflicting sectoral po among themselves and with the NSSD, as well as with environmental policy. It also the Action Plan of the National Strategy for ICZM.			
	The National Strategy for Integrated Coastal Zone Management (NS ICZM, adopted in 2015):		
	Contains a special part related to water, covering all waters including groundwater; Light Contains a special part related to water, covering all waters including groundwater;		
	• Identifies key issues, challenges and strategic goals for integrated coastal zone management;		
	 Comprises a set of operational objectives for each goal, with measures, activities, indicators and partnerships for implementation. 		
Consideration of	The Water Basis provides description of all groundwater sources, per water basin, capacities of		
round ater and of	individual groundwater source, as well as their usage, pollution prevention and protection		
coastal aquifers	measures. The overall assessment of the state of groundwater shows that ecological status is good.		
	Main sources of pollution are communal waste waters, industrial waste waters, usage of fertilizers		
	and intrusion of saline waters in coastal area.		
Le al frame or (Main ri	nci les and measures)		
ater o nershi	Water is State property (article 6 Water Law).		
Ground ater	Groundwater is considered under the Water Law.		
consideration			
Coastal aquifers	The Law on Public Maritime Domain includes in the Public Maritime Domain submarine springs		
consideration	and wells on the shore (article 2) (Official Gazette of the Republic of Montenegro, No. 14/92).		

Fi ure 26 Overview of policy and legal aspects of water management in Montenegro (UN Environment/MAP and UNESCO-IHP, 2015)

S no sis of riorities and a s - It is necessary to increase the sustainability of the coastal regions of Montenegro through sound management of aquifers in a way that local environmental gains can be achieved in response to the anticipated significant economic growth expected in the coming years. Furthermore, with the anticipated increase in climatic variability in the region and frequent flood and drought events, the water in the local aquifers can sustain environmental sustainability – both in terms of socio-cultural aspects, as well as coastal and marine biodiversity. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone. ICZM in Montenegro has been seen as the key to achieving sustainable development of the coastal zone, and substantial steps have been taken to develop ICZM policy and an implementation framework, including the National ICZM Strategy. The necessary pre-conditions are therefore mostly in place to deliver ICZM. However, the key weaknesses and gaps lie in the development of the wider supporting, legislative framework, including spatial plans. However, this is very much part of a wider 'work in progress' as Montenegro moves towards EU Accession.

The priorities identified include:

- Preparing a detailed vulnerability assessment of the coast and the sea at the selected locations out of six priority locations proposed in the National ICZM Strategy;
- Integrating the general vulnerability assessment in the narrow coastal zone in the CAMP Montenegro project, and continuing efforts to collect missing data to insure accurate analysis and projections;
- Developing local ICZM plans that integrate Climate Variability and Change and projections. Local plans should be concrete enough to ensure the increase of the resilience to climate change through the application of the ICZM tools. As a positive example, the Šibenik-Knin County Coastal Plan should be used;
- Establishing a coastal database (a coastal observatory), in line with the Action Plan of the National ICZM Strategy, aiming to ensure at least:
 - generation and collection of data for the selected ICZM priority indicators;
 - continuous monitoring through application of these indicators;

- support of the ICZM coordination mechanism to ensure institutional coordination and cooperation needed for the unhindered functioning of this database.
- Support for the measures and activities to realize the vision of the IRMP for the Buna/Bojana area;
 and
- Support for awareness raising and capacity building as a prerequisite for successful implementation and enforcement of coastal and water laws and policies.

Rele ant UNDAF riorities – Environmental sustainability is recognized by Montenegro as one of the five priority areas in its UNDAF 2017 – 2021, and sustainable management of natural resources is referenced in this area's priority outcome: "By 2021, the people of Montenegro are benefitting from sustainable management of cultural and natural resources, combatting climate change and disaster-risk reduction." To achieve this outcome, the UNDAF references several national priorities, including capacity building for governmental institutions in the domains of environmental protection and climate change, and the enhancement of water quality management and access to clean water for all. Child Project 2.1 will contribute to these national priorities through activities to promote the sustainable development of the coast and its resources using ICZM instruments, and to enhance the protection and sustainable management of coastal groundwater resources and their related ecosystems. Further contributions to the UNDAF in Montenegro will be achieved through the building of institutional capacity on climate change adaptation, marine spatial planning, collection of water data, and the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF MOROCCO

Morocco's Mediterranean coast is approximately 512 km in length and is subject to the influence of Atlantic waters. It is characterized by an often-uneven relief with cliffs valleys, bays and beaches. The eastern part of the Mediterranean coast of Morocco is flatter and is characterized by the presence of a large coastal lagoon (Nador Lagoon) and the mouth of a major watercourse (La Moulya). Anthropogenic pressure on the Mediterranean coast of Morocco is concentrated in three major urban agglomerations (Tangiers, Tétouan and Nador), two major industrial centers (Tangiers and Nador), and three important ports (Tangier, Al Hoceima and Nador). In addition, the area is subject to the impact of heavy shipping traffic crossing the Strait of Gibraltar. Morocco's coastal zone attracts both domestic and international tourism with hotel units, second homes, and marinas (Saïdia, Marina Smir and Kabila) benefiting from the natural attractiveness of the area. Fishing in the northern zone of Morocco is essentially coastal and artisanal. Marine biodiversity is supported by habitats provided by several natural areas on the Mediterranean coast of Morocco including: Mouth of Moulouya, Nador Lagoon, Cape Three Forks, Cirque of Jebha, Coast of Rhomara, Koudiat Taifour, Smir Lagoon and Jebel Moussa.

Coastal ur ani ation - The percentage of built-up areas in Morocco within the first 10 km from the coastline increased from 0.8% in 1975 to 2.8% in 2015 (UN Environment-GRID, 2017). In the first kilometer, this percentage was 3.2 % in 1975, while in 2015 it was 8.5%. Within the distance of the first 150 meters from the coastline, the percentage of built-up land in 1975 was 2.9%, while in 2015 it was 7.6%. Morocco has increased its initial land-take between 1975 and 2015 by 234% in the first 10 km, by 170% in the first kilometer and by 164% in the first 150 meters from the coastline.

Le al frame or of the coastal one - Morocco ratified the ICZM Protocol in 2012. The comprehensive Littoral Law (the 'Loi Littoral') adopted in 2015 establishes the framework for the integrated management of the coast The Law requires the development of a National Coastal Plan and Regional Schemes for the coast, taking into account the limit of the non-buildable area and the areas in which certain types of activities are prohibited or subject to certain restrictions. The Law sets out specific measures for the management, protection, conservation and development of the coast including protection, conservation and development; access to the shoreline; specific provisions for beaches;

protection against pollution; and promotion of scientific research and innovation. However, although the Littoral Law has been adopted, it has not been fully implemented. In addition, the geographical extent of the coast in Morocco has not been defined according to the Article III of the ICZM Protocol.

Set ac - The Littoral Law defines a "non-constructible zone" of 100 meters from the coast within which development is prohibited, except for necessary constructions or installations. This non-constructible zone may be extended for reasons of habitat protection or coastal erosion. Non-marine transportation infrastructure must be located at least 2.000 meters from the shoreline.

Institutional frame or for the coastal one - Currently, the Moroccan coastline is governed by multiple, fragmented texts, often outdated and applied in an uncoordinated manner by many institutions, including sectoral ministries and departments. The Ministry of the Environment leads on ICZM and is implementing the ICZM approach through actions and projects with partners at local, national, regional and international levels.

Inter ministerial coordination - Management of the coast is still heavily influenced by sectoral administrative boundaries. However, the Littoral Law is promoting a more integrated approach going forward. The Law requires that the National Coastal Plan (PNL) and the Regional Schemes be submitted to a "National Commission for Integrated Coastal Management", composed of relevant administrations, councils of the regions, public institutions, research institutes, concerned organizations and professional bodies, as well as representatives of associations active in the field of coastal protection.

Plannin and IC M - The Department of Territory Planning has initiated a "National Strategy for the Littoral" and completed a strategic diagnostic. The PNL is also being developed and should be submitted to the National Commission by the end of 2018. There is a difference, however, between the administrative unit-based boundaries of the Strategy and the more narrow, ecological-based boundaries of the PNL, this difference reflecting the respective lead government departments of Territory Planning and Environment. Tenders for the Regional Schemes of the Coast, as required under the Littoral Law, are in progress. Morocco has been an active partner in ICZM projects including the Coastal Area Management Programme (CAMP Morocco) with UN Environment/MAP, the Short and Medium-term Priority Environmental Action Program (SMAP) and Medwetcoast with the EU, and the GEF-financed project, implemented by the World Bank, "Integrated Coastal Zone Management" in the Oriental Region. The ACCMA Project (Adaptation of Coastal zones to Climate Change) under the Climate Change Adaptation in Africa program proposed an action plan for the integrated coastal zones management. There is no specialized research center in Morocco dedicated to ICZM, but universities and research centres include elements of ICZM in their training and awareness actions and programs. Morocco has a been very active in ICZM capacity building and awareness raising through training, education, research and international collaboration.

Monitorin - Environmental monitoring is instituted in Morocco by a number of laws and legal provisions for environmental monitoring in the marine environment, including framework law No. 99-12. National Institutions and agencies have the necessary capacities to carry out the analyses required for these monitoring activities. Relevant monitoring programs in Morocco include:

- Sampling for fisheries resources;
- Network quality and safety of the marine environment;
- Network stranding;
- Assessment of the coralligenous and seagrass beds of Zostera marina in the marine area of Jbel Moussa;
- National Program for Monitoring the Quality of Bathing Waters;
- Program for monitoring pollution from land-based sources released into the Mediterranean; and
- Monitoring the Osprey population of Al Hoceima National Park.

Surface aters and related ecos stems - The total surface water availability in Morocco is estimated at 18 billion m³ per year of which nearly 8 billion m³ are used. In an average year, surface water supplies amount to a few million cubic meters for the poorest basins: Saharan Basin (25 Mm³), Souss Massa (625 Mm³), Ziz, Guir, Rhéris and Maïder (625 Mm³), and in billions of cubic meters for the most favored basins: Loukkos, Tangérois, Mediterranean Coast (3600 Mm³) and Sebou (5600 Mm³). The preliminary results of an inventory initiated in 2014 and still in progress shows that in the country there are more than 300 wetlands, located both on the coast and in the inland, that are very diverse in terms of their biodiversity. Among these, 24 are Ramsar Sites, covering a total area of about 272,000 hectares. It is estimated that 25% of the surface area of these areas was lost between 1978 and 1999. The siltation of dams is an important constraint to the mobilization of surface water that results in the loss of nearly 75 Mm³ / year. The total loss by siltation is currently estimated at around 1,740 Mm³. This capacity would be of the order of 3 billion m³ in 2030, almost equivalent to the total capacity of projected dams.

Climate projections established by the National Meteorology Directorate, show an increase in temperatures of 2 °C to 5 °C depending on the region, and a decrease in precipitation of between 5% and 50% by the end of the century. Water inflows have already decreased by 20% on average since 1950. In spite of this, the increasing variability of rainfall and extreme weather events have led to more frequent occurrences of floods. Exceptional flooding has been recorded between 2008 and 2011, in particular in the north of Morocco, with 30-year and 100-year flood events. At the same time, several droughts have affected some areas or all of Morocco in recent decades (State of the Environment of Morocco, 2015).

Although wastewater treatment rates in Morocco have significantly increased, from 6% in 2005 to around 77% in 2017 (ONEE, 2018), a significant portion of wastewater is still discharged into the environment without purification. Moreover, fertilizers and organic matter present in surface waters leads to eutrophication making the water unsafe and generating additional costs for treatment to standards for potable water.

Coastal aquifers and related ecos stems - Moroccan Mediterranean coastal aquifers (Figure 27), are relatively small (less than 300 km²), all of alluvial type and mostly unconfined. They are important for the local rural economy and constitute a source of water mainly for agriculture, but also for local domestic water supply and industrial use. The Bou Areg aquifer is connected with the regionally important Nador coastal wetland and related ecosystems. Morocco's high average precipitation (460 mm/yr) ensures elevated recharge rates in aquifers (more than 100 mm/yr).



Fi ure 27 Main coastal aquifers in Morocco (UN Environment/MAP and UNESCO-IHP, 2015)

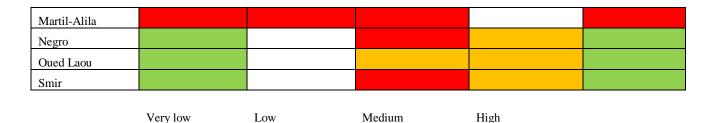
An overview of the analysis of the main coastal aquifers in Morocco undertaken for the MedPartnership is provided in Figure 28.

Su marine round ater dischar es - Groundwater discharges to the Mediterranean from coastal aquifers in Morocco are estimated at 20 Mm³/yr.

Polic and le al as ects of ater mana ement In 2016, Morocco adopted a new Water Law (36-15) that defines the rules for an integrated, decentralized, and participatory management of water resources, targeting the sustainable use of water resources and hazards prevention. It builds on the 1995 Water Law (10-95), which gave a rather full framework for the water sector, and aimed at promoting the sustainable management of water resources by basin, through principles such as integrated management, "user-pays" or "polluter-pays" were introduced. However, it left some gaps such as drought or flood management, fee recovery, sanitation, wastewater discharged to the sea and desalination.

The 2016 Water Law reinforces the 1995 legal framework by introducing new provisions for the reuse of wastewater and rainwater, for the protection and preservation of water resources, and for the improvement of protection against climate change. The 2016 Water Law also marks the introduction of advisory boards as the basin level, as well as the implementation of a legal framework for water desalination.

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Bou-areg					
Rhis-Nekkor					



Fi ure 28 Findings of the analysis of the main coastal aquifers in Morocco undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Level of concern

The protection of groundwater resources is addressed in a dedicated sub-section, under the chapter dedicated to the conservation of water resources. In particular, perimeters of protection can be defined in areas where groundwater exploitation may endanger existing water resources. If needed, restricted areas can be defined, where aquifers are facing overexploitation or where groundwater quality may deteriorate. Additionally, in order to ensure sustainable use and preservation of water resources and its related ecosystems, river basin organizations can conclude participatory management contracts for aquifers or aquifer sections (as well as rivers, portions of river, lakes or portions of lake), in agreement with partners and water users. The participatory management contract shall specify the action plan and the terms and framework of the participation of water users to the management and control of water resources.

Nine basin agencies were established across the entire national territory with considerable responsibilities for surface and groundwater, such as delivering permits and concessions for the development of groundwater. An overview of the most relevant information concerning the national strategy for water resources in Morocco is set forth in Figure 29.

ater olicies and str	rate ies						
National strate for	the ater sector (ado ted in 2 9 – currentl ein re ised and extended)						
Main rinci les and	The three pillars of the national strategy for water are:						
o jecti es	 Demand management and enhancing the value of water: more efficient use and water savings in all sectors (drinking water, irrigation, industrial and touristic water) The management and development of water supply: Mobilization of conventional water resources: construction of large and small dams, and interbasin water transfers Mobilization of non-conventional water resources: desalination of seawater, demineralization of brackish groundwater, reuse of treated wastewater and collection of rainwater Preservation and protection of water resources, natural habitats and fragile zones: 						
	 Preservation of groundwater resources: governance model, reinforcement of control systems on groundwater abstractions, establishment of protection banning perimeters, and development of artificial recharge of aquifers Protection of the quality of water resources: sanitation plans and treatment of wastewater, national program of prevention and combatting industrial pollution, implementation of the national plan of the management of domestic and assimilated wastes Conservation of hydrographic basins, oasis and wetlands; protection of springs, program of protection of wetlands and natural lakes, fight against desertification, protection of the coastline 						
	It also establishes accompanying measures, especially: the modernization of information systems and reinforcement of means and competences Continuation of legal and institutional reforms Tariff and financing systems						
Consideration of	Groundwater is considered as a precious and strategic resource for the supply of domestic water to be						
round ater and	preserved and used in the frame of a rational and integrated management which will guaranty its						
coastal aquifers	equilibrium and sustainability for future generations.						
The le al frame or	(rinci les and ro isions)						
ater o nershi	All water resources are part of the public domain (Water Law no. 10-95 of 1995)						

Consideration of	Groundwaters are ruled by the Water Law (10-95 of 1995)					
round ater						
Consideration of	None					
coastal aquifers						

Fi ure 29 Overview of policy and legal aspects of water management in Morocco (UN Environment/MAP and UNESCO-IHP, 2015)

S no sis of riorities and a s – A coastal population density that is already high (more than 500 inhabitants/km²) and growing is driving coastal aquifer degradation. Other pressures on water resources include the lack of wastewater treatment plants, unregulated water use for irrigation, and the use of fertilizers. Growing salinization of groundwater – often beyond the limits for irrigation - is generalized and mostly linked to excessive extractions and continuing use for irrigation, interactions with saline surface waters (Bou Areg), and locally to seawater intrusion (Nador). Nutrient enrichment of surface water and groundwater is common in both agricultural and urban areas.

Morocco has a strong capacity for the implementation of ICZM, including a very comprehensive legal framework (the Littoral Law) compatible with the Protocol. Barriers, however, remain in the form of administrative fragmentation and the lack of implementation of coastal protection and conservation measures, or the application of restrictions on coastal development. The necessary pre-conditions are mostly in place to deliver ICZM. However, the key weaknesses and gaps lie primarily in the progress towards a national ICZM strategy or plan consistent with the ICZM Protocol and the full adoption and implementation of the Littoral Law. Ground-level implementation and integration remains relatively weak. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone.

The priorities identified include:

- Developing the National ICZM Strategy/Plan consistent with the ICZM Protocol;
- Preparing regional ICZM plans and their implementation;
- Building capacity for ICZM at the local level;
- Identifying measures to overcome legal/policy/institutional barriers to ICZM;
- Raising awareness needed as a vital prerequisite for successful enforcement and implementation of coastal and water laws and policies;
- Technical assistance for monitoring of coastal indicators; and
- Exchanging best practices in ICZM including the setback implementation.

Rele ant UNDAF riorities - In its UNDAF 2017 – 2021, Morocco has designated "Inclusive Sustainable Development" as one of its six expected results, and has identified a number of specific outcomes that can be enhanced through collaboration with the United Nations system, including territorial planning that integrates the principles of sustainable development and the preservation of natural and cultural heritage, and increased equitable access to natural resources and ecosystem services, amongst others. Child Project 2.1 will contribute to these national priorities through activities to promote the sustainable development of the coast and its resources using ICZM instruments, and to enhance the protection and sustainable management of coastal groundwater resources and their related ecosystems. Further contributions to the UNDAF in Morocco will be achieved through the building of institutional capacity on climate change adaptation, marine spatial planning, collection of water data, and the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

T E COASTAL ONE OF TUNISIA

The Tunisian coast stretches over 2,290 km along the Mediterranean Sea, representing about 5% of the entire Mediterranean coast (APAL and UNDP, 2012). The northern coast is rocky with a narrow continental shelf. Along the east coast, the continental shelf is relatively wide and the sandy beaches are extensive. The southern coast along the Gulf of Gabes is characterized by sandy and sandy-muddy bottoms and a gently sloping continental shelf. The overall health of coastal ecosystems in Tunisia can be considered good, except in certain pollution hot spots, especially due to eutrophication. There are several important cities on the Tunisian coast, including the capital city of Tunis and touristic areas such as Hammamet, Tabarka, and Sidi Bou Said.

Coastal ur ani ation - The percentage of built-up areas in Tunisia within the first 10 km from the coastline increased from 2.8% in 1975 to 7.6% in 2015 (UN Environment-GRID 2017). In the first kilometer, this percentage was 5.6 % in 1975, while in 2015 it was 12.4%. Within the distance of the first 150 meters from the coastline, the percentage of built-up land in 1975 was 4.1%, while in 2015 it was 8.6%. Tunisia increased its initial land-take between 1975 and 2015 by 173% in the first 10 km, by 119% in the first kilometer and by 113% in the first 150 meters from the coastline.

Le al frame or - Tunisia signed the ICZM Protocol in 2008 on the occasion of the Conference of Plenipotentiaries on the ICZM Protocol held in Madrid, but it has not yet ratified it. The protection of the coast has, however, been addressed in national legislation since 1995, both through the law related to the Maritime Public Domain delimiting the public domain and identifying uses, enforcement powers etc., and by the establishment of the Tunisian Coastal Protection and Planning Agency (APAL) under the supervision of the Ministry of the Environment. APAL is responsible for implementing the state policy in relation to the protection and management of the Littoral and the Tunisian Maritime Public Domain to ensure a sustainable and integrated management of the coastline and to meet national and international commitments. The laws do not specifically refer to ICZM or the requirements of the Protocol, however the law establishing APAL refers to environmental protection for specified coastal habitats such as littoral forests, estuaries, marine capes and coastal wetlands. Further legislation established Marine and Coastal Protected Areas (2014), and the Land Use and Urbanism Code (1994). The Constitution of the Tunisian Republic ensures gender equality in representative bodies, including those established for natural resources management issues.

Set ac - The Land Use and Urbanism Code forbids development at a distance of less than 100 meters from the limit of the Maritime Public Domain outside areas covered by approved Urban Development Plans.

Institutional frame or - APAL has comprehensive powers for the protection and sustainable management of the coast. Tunisia has created a National Commission for Sustainable Development (1993), and the Council of Ministers has an inter-ministerial coordination function for sustainable development. A "Sustainable Development and Rights of Future Generations Commission" is authorized by the 2014 new Constitution but not yet implemented.

Inter ministerial coordination - Although there is no institution or body with the legal duty for coordination of ICZM, national committees have been established by decree of 2014 and 2017 for Management Plans Elaboration of Marine and Coastal Protected Areas. Furthermore, APAL convenes an Advisory Committee of several ministries as a mechanism for ICZM.

Plannin and IC M - A national strategy for ICZM in Tunisia is being prepared in the framework of the project "Addressing climate change vulnerabilities and risks in vulnerable coastal areas of Tunisia" (GEF/UNDP) (2014 - 2020). Furthermore, the project foresees the preparation of local ICZM strategies in two pilot areas, namely Ghar El Melh and Jerba. In the context of this project, an "Assessment study on women's needs" has been carried out in coastal pilot zones (2015). Tunisia has is a trilateral agreement

with Algeria and Libya concerning the joint management of the shared Northern Western Sahara Aquifer involving technical and institutional coordination.

Monitorin The requirements for environmental monitoring in Tunisia are codified in texts relating to the management of natural resources and to the preservation of the environment: The Water Code (Law No. 75-16); Regulations on discharges into the receiving environment (Decree No. 85-56 of 2 January 1985 and Decree No. 94-1885 of 12 September 1994); The conservation of species and natural habitats (Forest Code which was promulgated as early as 1966); The protection of the coastline and the control of the land use in the coastal zone (Code of town and country planning promulgated by Law 94-122 of 28 November 1994); The management of the Public Maritime Domain (Law no. 95-73 of 24 July 1995, as modified by the law no. 2005-33 of 4 April 2005); The Law on the Protection of Agricultural Land (Law No. 83-87 of 11 November 1983); Environmental Impact Studies (Law 88-91 of 2 August 1988 establishing the National Agency for the Protection of the Environment (ANPE) and amended by Law No. 92-115 of 30 November 1992).

Although environmental monitoring networks are not very developed in Tunisia, numerous initiatives have been implemented for monitoring aspects related to marine and coastal environments:

- National Monitoring Program for the Quality of the Marine Environment (MEDPOL Network);
- National Network for Monitoring the Production and Marketing Conditions of Bivalve Mollusks;
- National Water Quality Monitoring Network (COPEAU);
- Coastal Observatory hosted within APAL;
- Tunisian Observatory for Environment and Sustainable Development (OTEDD); and
- National Network of Stranding in Tunisia.

Surface aters and related ecos stems - The country has more than 256 wetlands, including 40 Ramsar Sites. The majority are in the north of the country, especially near the coast. At the end of 2016, Tunisia had 36 dams with a total holding capacity of 2,239 Mm³. The siltation of dams is an important constraint to the mobilization of surface water that has resulted in the loss of 20% of the original dams' capacity. Water pollution from nitrates and pesticides is another important concern, resulting from the improper use of mineral fertilizers and phytosanitary chemicals in agriculture. Furthermore, the significant interannual rainfall variability results in extreme events, either prolonged droughts or large floods.

Recent climate projections carried out by Tunisia's National Institute of Meteorology indicate a decline in precipitation of between 5% and 20% by 2050 depending on the region, with further decreases of between 10% and 35% anticipated by 2100. At the same time, temperatures are expected to rise between 1.2 °C and 2.3 °C by 2050 and between 2.9 °C and 4.3 °C by 2100, depending on the region. Pressures on water resources are therefore expected to intensify, driven on the one hand by rising temperatures and increased human consumption of water resources, and on the other hand by the anticipated reduction in precipitation. In the coming years, this will worsen structural water stress in Tunisia, where it is estimated that conventional water resources will decrease by 28% by 2030.

Coastal aquifers and related ecos stems - The area covered by coastal aquifers in Tunisia (Figure 30), is about 25,000 km² or nearly 15% of the total area of the country. Tunisian coastal aquifers vary greatly in size and are mostly contained in quaternary formations of sand and sandstone deposits in both confined and unconfined states. Agriculture accounts for the dominant use of groundwater from both shallow and deep aquifers. In shallow aquifers, agriculture is the only consumer of groundwater, while in some deep aquifers there is also a small amount of groundwater used for drinking water. Shallow coastal aquifers are strongly related to the Mediterranean Sea and salty marshes.

Annual rainfall varies greatly from one region to another, from 500-800 mm/yr in the north to 50-100 mm/yr in the south. About half of all shallow coastal aquifers are characterized as over-extracted. Groundwater levels have been monitored since the 1950s while monitoring for groundwater quality

(salinity, nitrogen compounds) began in 1998. An overview of the analysis of the main coastal aquifers in Tunisia undertaken for the MedPartnership is provided in Figure 31.



Fi ure Main coastal aquifers in Tunisia (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Chegarnia-Sidi					
Abicha-Oued El					
Khairat					
Côte orientale					
Gabes Shallow					
Grombalia					
Mahdia-Ksour					
Essaf-Sidi					
Alouane					
Mornag					
Ras Jebel					
Sahel de Sfax					
Deep					
Sahel de Sfax					
Shallow					
Tabarka					

Fi ure 1 Findings of the analysis of the main coastal aquifers in Tunisia undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Low

Level of concern

Very low

Su marine round ater dischar es - No official estimates of submarine groundwater discharges from Tunisia's coastal aquifer are available.

Medium

High

Polic and le al as ects of ater mana ement Tunisia adopted in 1975 a Water Code that has been amended in 1995 and its revision is ongoing. The Water Code has rather exhaustive provisions and which reserves an important part for the consideration of groundwaters. The Water Code includes considerations of the impact of climate change on water resources and ecological uses such as wetlands. The Ministry in charge of the environment is currently elaborating an environmental code. The code deals, inter alia, with the sustainable management and the preservation of groundwaters. An overview of the most relevant information concerning the legal framework for water resources in Tunisia is set forth in Figure 32.

i 				
Water policies and strategies:				
The National Strategy for the Protection of Groundwaters (2010-2014)				
Main rinci les and	Efficiency, sustainability, and preservation of groundwaters with an improved management of			
o jecti es	conventional water and reinforcement of the fight against pollution.			
Consideration of	The strategy deals with groundwater.			
round ater and coastal				
aquifers				
The legal framework (principles and provisions)				
Water ownership	Water is part of the public domain (Water code).			
_	The Tunisian constitution guaranties the right to water (article 44)			
Consideration of	Groundwaters are considered by the Water Code			
groundwater	·			
Consideration of coastal	None			
aquifers				

Fi ure 2 Overview of policy and legal aspects of water management in Tunisia (UN Environment/MAP and UNESCO-IHP, 2015)

S no sis of riorities for action and a s - Major concerns include degradation of coastal aquifers due to seawater intrusion and reductions in borehole yields that are widespread and severe. There are also some local but severe cases of polluted water being drawn into aquifers.

The regulatory and institutional frameworks for sustainable development, spatial planning and the integrated management of the coast are fairly well developed, with clear mechanisms for and experience of institutional coordination. Tunisia is unique in that it has an agency (APAL) with wide ranging statutory duties relating to the management of the coast and well developed scientific capacity. The landward limits of the coast and specific coastal ecosystems are well defined, but pre-date the ICZM Protocol. The necessary pre-conditions are therefore mostly in place to deliver ICZM. However, the key weaknesses and gaps lie primarily in the lack of an up-to-date approved national ICZM strategy, further ground-level implementation, and the integration with surface water and aquifer management. Lack of legal institutional frameworks for groundwater governance in general, and coastal aquifers in particular, poses serious threats to environmental and socio-economic sustainability in large sections of the coastal zone.

The priorities identified include:

- Ratifying the ICZM Protocol;
- Updating national legislation where necessary to fully transpose the ICZM Protocol;
- Preparing a national ICZM strategy along with regional/local ICZM plans and their implementation;
- Raising awareness and building capacity needed for successful implementation and enforcement of coastal and water laws and policies;
- Technical assistance for monitoring of coastal indicators;
- Support for the management of transboundary groundwater with neighboring states.

Rele ant UNDAF riorities – In its UNDAF 2015 – 2019, Tunisia declares as one of its four priorities the creation of an inclusive, sustainable and resilient economic model, and cites a number of environmental challenges that must be addressed to achieve this new economic model, including the

sustainable, efficient and inclusive management of natural resources. Child Project 2.1 will contribute to these priorities through activities to promote the sustainable development of the coast and its resources using ICZM instruments, and to enhance the protection and sustainable management of coastal groundwater resources and their related ecosystems. Further contributions to the UNDAF in Tunisia will be achieved through the building of institutional capacity on climate change adaptation, marine spatial planning, collection of water data, and the conjunctive management of surface water and groundwater. Finally, gender has been mainstreamed in the activities of the project, including specific actions to promote gender equality and inclusivity.

Summar of le al as ects related to ater resources mana ement

Sub-regional summaries of the key legal aspects concerning water resources and considerations for groundwater are set forth in Figure 33 for the Adriatic sub-region and Figure 34 for the Southern and Eastern sub-region.

	Adriatic countries			
Le al frame or	Al ania	i	Montene ro	
Water ownership	State	State	State	
Groundwater consideration	Under Water Law(s)	Under Water Law(s)	Under Water Law(s)	
Specific provisions for coastal aquifers	No	No	Law on Public Maritime Domain covers submarine springs and near-shore wells	
Basin management	Yes	Yes	Yes	
Planning instruments	IWRM	Water management strategy	Water management strategy, ICZM Strategy	
Regulations on groundwater abstractions	Yes	Yes	Yes, except for "general"** uses	
Regulations on groundwater quality	Yes	Yes	Yes	
Sanitary protection zones (wells, springs, aquifers)		Yes	Yes	
Ratification of ICZM Protocol	Yes		Yes	

Fi ure Legal aspects: summary of main findings on present conditions (Adriatic countries)

^{**} i.e. without use of any equipment or construction information provided by country. GW, groundwater. Grey cells: no information provided by countries; white cells: yes; orange cells: no.

	Southern and Eastern Mediterranean countries					
	Al eria	E t	Le anon	Li a	Morocco	Tunisia
Le al frame or						
Water ownership	State	No information	State	State	State	State
Groundwater	Under Water	Under Water		Under Water	Under Water	Under Water
consideration	Law(s)	Law(s)		Law(s)	Law(s)	Law(s)
Specific provisions for coastal aquifers	No	No	No	Prohibition (Decree 791/1982) of any new GW abstraction in coastal aquifers	No	No
Basin management	Yes			Yes	Yes	
Planning instruments	Executive Decree		National Water Strategy		National Water Plan	
Regulations on groundwater abstractions	Yes	Yes ***	Yes	Yes	Yes	Yes

^{*} For households, bathing and recreation, from first aquifer.

Regulations on		Yes	Yes	Yes	Yes	Yes
groundwater quality						
Sanitary protection zones	Yes				Yes	Yes
(wells, springs, aquifers)						
Ratification of ICZM		Yes	Yes		Yes	
Protocol						

Fi ure Legal aspects: summary of main findings on present conditions (Southern and Eastern Mediterranean countries)

Interministerial Coordination Mechanisms in the artici atin countries

At present, mechanisms for interministerial coordination (IMC) on integrated coastal zone management (ICZM) and water resources management exist in some, but not all, of the nine countries participating in Child Project 2.1. An overview of the existing and anticipated coordination mechanisms on ICZM and water resources management is set forth in Table 3.

In terms of ICZM, Interministerial Committees were established in Algeria and Montenegro as a result of the MedPartnership. These committees are functioning, and Child Project 2.1 will make use of them. Child Project 2.1 will reinforce or initiate the creation of interministerial committees on ICZM in four additional countries: Bosnia and Herzegovina, Egypt, Lebanon and Tunisia. At present, no interministerial coordination mechanisms exist in Albania, Libya and Morocco, since in these countries coastal management is still heavily influenced by sectoral administrative boundaries and mostly left to the lower level of governments.

In Algeria, the IMC for ICZM established in the MedPartnership Project involves 8 Ministries, including 1 representative from the Direction Of strategic and budget planning. In Montenegro the IMC for ICZM established in the MedPartnership Project involves 9 Ministries, including the Ministry of Economy. In addition, in both countries, representatives of regional government, and different institutes dealing with the coastal mangement are involved.

Ta le: Existing mechanisms for Interministerial Coordination

	Existin antici ated mechanisms for Interministerial Coordination				
Country	Coastal zone management	Water resources management			
Albania	MAP System National Focal Points	IHP National Committee			
Algeria	IMC for ICZM established in the	IHP National Committee			
	MedPartnership				
Bosnia and	Child Project 2.1 will support the launch of	None			
Herzegovina	IMC for ICZM				
Egypt	National Steering Committee for ICZM	IHP National Committee			
Lebanon	Child Project 2.1 will support the launch of	IHP National Committee			
	IMC for ICZM				
Libya	None	IHP National Committee			
Montenegro	IMC for ICZM established in the	None			
	MedPartnership				
Morocco	National Commission for Integrated Coastal	IHP National Committee			
	Management				
Tunisia	Child Project 2.1 will support the launch of	IHP National Committee			
	IMC for ICZM				

In the case of Albania the 2014 Law on Territorial Planning and Development and the NSDI II (2016) contain provisions for institutional coordination at national, regional and local levels. Appropriate efforts

^{***} Permission required for drilling water wells and installing pumps. Grey cells: no information provided by countries; white cells: yes; orange cells: no.

will be taken during the execution of Child Project 2.1 to build on and to expand these existing mechanisms by using the entry point provided by the MAP system Focal Points.

In the case of Libya, due to the current situation in the country, it is not possible to commit to the creation of an IMC mechanism on ICZM. However, appropriate efforts will be taken during the execution of Child Project 2.1 to build on existing mechanisms, if any, to support Libya with the implementation of the ICZM Protocol and its policy instruments.

In the case of Morocco, the Littoral Law approved in 2015, requires that the National Coastal Plan (PNL) and the Regional Schemes be submitted to the Commission for approval. Child Project 2.1 will rely on this governance mechanism to support Morocco with the implementation of the ICZM Protocol and its policy instruments

Interministerial coordination on water resources for the activities of Child Project 2.1 will be achieved through the National Committees established by governments for UNESCO's International Hydrological Programme, which is the executing partner for the corresponding activities of this Child Project. The IHP National Committees are constituted and run under the authority of national governments (involving the Ministries responsible for water resources) and play a critical role in the implementation of the IHP's programme of work. At present, IHP National Committees are established in seven of the nine participating countries of Child Project 2.1: Albania, Algeria, Egypt, Lebanon, Libya, Morocco and Tunisia. In the remaining two countries – Bosnia and Herzegovina and Montenegro – efforts will be taken to address water resources issues through the coordination mechanisms on ICZM that exist or that will be created presently in these countries. Moreover, efforts will be made to involve key line ministries the institutions which has responsibility of planning and finance in each country.

For both activities under component 1 and component 2 the countries' nominated national project focal points will be involved interministerial coordination related processes.

) T E PROPOSED ALTERNATIVE SCENARIO

The Mediterranean Sea Program - Enhancing Environmental Security: Rationale and Framework

The MedPartnership and ClimVar & ICZM GEF projects have enriched the knowledge on the Mediterranean environment, unraveled the implications of climate change and variability and the importance of coastal aguifers; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries, UN bodies, civil society organizations (CSOs), bilateral donors and the EU; tested on the ground the feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate related impacts. Alongside and thanks to these GEF funded support actions, UN Environment/MAP, at the request of the Contracting Parties to the Barcelona Convention, has developed a comprehensive regional policy framework including strategies, plans and guidelines that will serve as guidance for the regional and national efforts in the Mediterranean for the years to come. The update of the National Action Plans (NAPs) for the implementation of the LBS Protocol of the Barcelona Convention and its Regional Plans in the framework of the Strategic Action Programme to address pollution from land-based activities (SAP-MED), and preparation process succeeded in creating momentum at local, national and regional levels, with a remarkable level of involvement and participation of all stakeholders. In each country, national and local authorities, the industrial sector and NGOs discussed priorities, possible actions and opportunities for investment, thus making the NAPs a realistic initiative.

These remarkable achievements, while not yet bringing about measurable changes in the levels of environmental stress or in degradation trends, have however created the indispensable foundation and the

enabling conditions for initiating national actions targeting major causes of marine and coastal transboundary degradation. The task is now to confront the challenge of implementation, thereby achieving concrete and lasting results.

The stage of assessments, diagnostics, priority setting, planning and experimentation having been completed, a higher level of effort is now required at the national and regional levels. This renewed and expanded effort is not only justified by the continuing degradation of the Mediterranean coastal zone and shallow marine environments, but also urgent in view of the looming climate related threats, and of the loss of livelihoods and dramatic deterioration of social conditions along critical sections of the Southern and Eastern Mediterranean shores.

To address this multiplicity of threats, countries have joined efforts and obtained further GEF support through the Programmatic Approach funding modality. The "Mediterranean Sea Programme: Enhancing Environmental Security", approved by the GEF Council in 2016 aims to assist GEF beneficiary countries of the Mediterranean Basin to rise to this challenge and step up their efforts and commitments, including those financially related.

The term "environmental security", used in the title of the proposed Programme to capture its overall perspective and goal, embraces three categories of concerns:

- Concerns about the adverse impact of human activities on the environment; the emphasis here is on
 the security of the environment as a good in itself, for the sake of future generations, as the context
 for human life.
- Concerns about the direct and indirect effects on national and regional security of various forms of
 environmental change (especially water scarcity and degradation), which may be natural or humangenerated; here the focus is on environmental change triggering, intensifying or generating the forms
 of conflict and instability relevant to conventional security.
- Concerns about the insecurity that individuals and groups (from small communities to humankind)
 may experience due to environmental change such as water scarcity, air pollution, climate variability
 and change.

The current situation of the Southern and Eastern shores of the Mediterranean shows all the signs of progressive deterioration of environmental security as a consequence of complex and interlinked factors. Among them, the loss and degradation of coastal and shallow marine ecosystems and of the scarce freshwater resources, compounded by the increasing negative impacts of climate variability and change, play an important role in determining social instability and political volatility. The presumption underlying the Programme design and its seven Child Projects (CPs) is that overall environmental security, including the sustainability of the livelihoods of growing coastal populations and their resilience to the adverse impacts of climate change and variability, will be improved by:

- reducing nutrient pollution and habitat degradation in coastal hot spots (CP 1.2, 1.3);
- contributing to the improved health of humans and ecosystems through the elimination of persistent toxic substances in hot spots (CP 1.1, 1.2., 1.3);
- implementing ICZM and introducing conjunctive surface and groundwater management in the coastal zone, thereby protecting coastal groundwater-related ecosystems (CP 2.1);
- promoting the nexus planning approach to reconcile conflictive coastal resources uses (CP 2.2);
- protecting coastal/marine biodiversity (CP 3.1).

Child Project 2.1 "Mediterranean Coastal zones: Water Security, Climate Resilience, and Habitat Protection": Rationale

Child Project 2.1 of the MedProgramme addresses Mediterranean coastal zones where the most pressing climate-related and sustainability concerns are concentrated, and where most marine degradation originates. It is aimed at achieving positive impacts in the following domains:

- Sustainability of the coastal zone resources in beneficiary countries through the expanded compliance
 with the ICZM Protocol, the adoption of national ICZM strategies, coastal plans and instruments, and
 improved gender equality;
- Resilience to climatic variability and change and water security of coastal populations through
 improved sustainability of services provided by coastal aquifers and by groundwater-related coastal
 habitats; and
- Effectiveness, long-term sustainability and replication potential of project results by sharing experiences and lessons learned in and among countries, and full integration of gender consideration.

The project purpose is to assist countries, in particular coastal zone managers and populations, in adapting to evolving climatic conditions threatening the sustainability of the freshwater supply, and introducing land use policies and development practices respectful of the diverse Mediterranean coastal zones characteristics: intrinsic vulnerabilities, natural and cultural functions, freshwater-seawater interactions; and geological processes: from karstic, to flood plain, to fluvial- deltaic, to barrier-strandplain. By promoting gender equality principles in coastal zone management practices and policies, and mainstreaming gender consideration in all its activities, the project will improve effectiveness and sustainability of integrated coastal zone management in the Mediterranean region. Diagnostic studies and assessments developed with GEF support by the Barcelona Convention parties (MedPartnership), pointed to three major environmental and socio-economic degradation processes affecting the Mediterranean coastal regions and the marine environment:

- disruption of coastal zone natural processes due to coastal urbanization and other human activities, and to changing climatic conditions causing erosion, diminished groundwater recharge, loss of ecosystem resources;
- widespread salinization and degradation of coastal aquifers strategic freshwater resources sustaining coastal populations and habitats due to over-exploitation, pollution from inadequate land use practices, seawater intrusion, and climatic extremes; and
- loss of ecosystem services provided by major coastal wetlands, lagoons and humid zones due to anthropogenic alterations of the seawater-freshwater interface, excess sedimentation, and eutrophication with consequent deterioration of local livelihoods, biodiversity, and the shallow marine environment.

To reverse these degradation trends, Child Project 2.1 will apply the tools and scale up the approaches developed by MedPartnership, summarized below:

- Morocco Nador Lagoon and Bou Areg aquifer: <u>Hydrogeochemical assessment of the effects of human pressure on coastal groundwater quality for the development of water management strategies.</u>
- Croatia Novljanska Zrnovnica karstic spring and Pula coastal aquifer: <u>Coastal aquifer vulnerability</u> mapping
- Tunisia Ghar El Melh coastal aquifer and lagoon: <u>Vertical and horizontal groundwater vulnerability mapping</u>
- Albania and Montenegro Buna/Bojana delta and coastal plain: <u>Joint ICZM and IWRM Plan</u>, integrating Groundwater/Aquifers (Integrative Methodological Framework IMF)
- Algeria Reghaia Coastal zone: Coastal Zone Plan: <u>ICZM Plan Integrating Groundwater/Aquifers</u>
- Lebanon Deir El-Nouriyeh-Cliffs of Ras Ech-Chekkaa and Tyre Beach Natural Reserve: Assessment of the impacts of climate change on water resources and coastal wetlands
- Algeria, Croatia and Montenegro: Support in the preparation of National ICZM Strategies

• Lebanon and Syria – Orontes/Assi River: <u>Advancing IWRM planning at the river basin level</u> in the East Mediterranean

Theory of Change

In line with the MedProgramme design principles, architecture and objectives, the design of the project assumes that by supporting and accelerating selected countries' action in defining, through highly participatory processes, and implementing integrated land and water coastal zone management strategies and plans and coastal aquifer management plans, the project will advance coastal freshwater ecosystem integrity, water security of coastal populations, habitat protection, rational use of coastal lands and seascapes, diversified and climate-resilient coastal development, and gender equality.

The Theory of Change (Figure 35) informing the project design builds on the notion that if the coastal zones are protected through management plans respectful of the coastal habitats and ecosystems; if priority coastal aquifers are sustainably managed and/or protected from seawater intrusion; if land uses in priority coastal zones are regulated respecting their intrinsic vulnerabilities and natural characteristics including coastal environmental and geological processes; if transboundary cooperation will ensure harmonization of policies and of monitoring procedures, then the coastal populations along the southern and eastern Mediterranean shores will benefit from improved health conditions, more stable livelihoods, gender equality and enhanced resilience to climatic change and variability. A summary of the expected achievements of the project is set forth in Table 4.

Long Term Expected Impacts: The coastal populations along the Southern and Eastern Mediterranean shores benefit from improved health conditions, more stable livelihoods, and enhanced resilience to climatic change and variability. Intermediate State: Countries independently engage in implementing integrated coastal zone and aquifer management plans. Cooperation agencies and IFIs adopt and mainstream approaches and solutions promoted by the Program. Assumptions: Drivers Countries, convinced of the concrete Recognition by countries of the need to effectiveness of Project's approaches and of manage and protect coastal freshwater the environmental and social benefits to be resources and related ecosystems. derived from them commit to implementation Binding commitments reached at the global and regional levels. of relevant plans, reforms and investments. Mitigation mechanisms of risks related to Well established transboundary cooperation social instability, migratory fluxes and frameworks. Regional cooperation providing extreme climatic events in the project sites incentives and support structure. prove to be effective. Outcome: The momentum and the critical mass of interventions needed to trigger and sustain countries' action in coastal zone integrated land and water management created Outputs: (In selected hotspots and priority areas) Broader adoption of Coherent regional Integration within the Environmental stress framework characterized ICZM context of critical reduction and fully integrated coastal by the systematic zone and water freshwater resources improved climate application of the ICZM (groundwater) so far resilience through resources management principles enshrined in policies and practices. neglected and strategic interthe Barcelona threatened by sectoral coordination Convention Protocol. irreversible loss. and innovation.

Ta le Summary of Expected Project Achievements

Tar ets	Out uts
At least 12,500,000 hectares of coastal landscapes and seascapes under improved management ICZM Protocol ratification process under way in three additional countries	1 ICZM National Strategy submitted for adoption (Egypt) 1 ICZM National Strategy and 1 Integrated Management Plan including consideration of IWRM and coastal groundwater (IMF approach) submitted for adoption (Lebanon: Damour) 2 ICZM Plans submitted for adoption (Morocco: Tanger-Tétouan- Al Hoceima Area and in Montenegro: Boka Kotorska Bay area [Boka Bay]) Proposals for Inter-ministerial approaches discussed with the relevant authorities in four project countries 3 Sub-regional (Adriatic, Southern and Eastern Mediterranean) trainings in support of ICZM Protocol implementation
Reinforced awareness and capacity of countries in the implementation of comprehensive ICZM policies and practices	ratification MedOpen course linked with other similar courses dealing with integrated approaches Yearly advanced virtual training course during the project implementation period 300 stakeholders trained on ICZM, Maritime Spatial Planning (MSP) and Climate Variability and Change (CVC) adaptation New promotional materials developed for awareness campaigns on yearly basis during the project implementation period
Five high priority coastal aquifers and related ecosystems under improved conjunctive surface and groundwater management Submarine Groundwater Discharges Assessments	 1000 persons attend or exposed to awareness raising events Management Plans produced for 5 priority coastal aquifers, and submitted for adoption by local/national governance entities: Albania and Montenegro – Buna-Bojana transboundary coastal aquifer Egypt – North West coastal aquifer Lebanon – Damour coastal aquifer Morocco – Rhiss-Nekkor coastal aquifer Tunisia – Ras Jebel coastal aquifer Monitoring networks and protocols designed and field tested and trainings conducted for all 5 priority aquifers. Completed for all project countries
	At least 12,500,000 hectares of coastal landscapes and seascapes under improved management ICZM Protocol ratification process under way in three additional countries Reinforced awareness and capacity of countries in the implementation of comprehensive ICZM policies and practices Five high priority coastal aquifers and related ecosystems under improved conjunctive surface and groundwater management

Reinforced awareness and capacity of countries in the implementation of conjunctive surface and	3 Sub-regional (Adriatic, and South, Central and Levantine Basins) conjunctive surface and groundwater management stakeholders' training modules implemented
groundwater management	5 National Dialogues to identify potential conjunctive management solutions

The project consists of two Components:

Com onent 1 Coastal one Mana ement

ICZM and the IMF

In recent decades, parallel management approaches have been developed to respond to societal impacts on the terrestrial, freshwater and marine environments in the Mediterranean basin. These include ICZM (Integrated Coastal Zone Management), IWRM (Integrated Water Resources Management), and more recently Coastal Aquifer Management. Their focus has been most acute in coastal areas and in the management of the key resource - water - with the potential for overlap, the duplication of resources, and a lack of coherence in policies, strategies and actions. Management approaches have become more complex, often resulting in less, rather than more, clarity. In order to overcome these negative potentials and instill simplicity, the Integrative Methodological Framework (IMF) was developed through a joint initiative by the Global Water Partnership (GWP Med), the Priority Actions Programme/Regional Activity Centre (PAP/RAC) of UN Environment/MAP, and the UNESCO International Hydrological Programme (IHP) . Its purpose was to merge the three management approaches in such a way that 'the whole is greater than the sum of the parts'. The resulting IMF is a comprehensive, comprehensible, and an operational methodology for the integrated and sustainable management of the Mediterranean ecosystems constituted by the coastal zones, river basins and coastal aquifers (Box 1).

The methodology is described in, "An Integrative Methodological Framework (IMF) for coastal, river basin and aquifer management - towards converging management approaches for Mediterranean coastal zones "15 (2015). The IMF was prepared under the direction of international experts with extensive experience in their respective fields across the Mediterranean region and globally. This document was a major contribution of the Global Environmental Facility (GEF) supported MedPartnership project.

This IMF was operationally tested in the development of a number of coastal plans: the Integrated Resource Management Plan for the Buna/Bojana Area (Albania/Montenegro), the Coastal Plan for Reghaïa (Algeria), the ICZM/IWRM plan in Awali River and coastal area (Lebanon), and the Coastal Plan for the Šibenik-Knin County (Croatia). At its core the IMF consists of a simplified and easily transferable five-stage planning process. The five stages carry the planners and stakeholders from the basic foundation stage of scoping, agreeing on geographic boundaries and stakeholders etc., developing the shared vision, through to the development of the plan or strategy, and its realization through actions. Its strengths lie in its focus on outcomes leading to sustainability, its conceptual simplicity, and its universal transferability.

The triggers for the initiation of this process may be different, these could include; legal requirements (such as the ICZM Protocol, WFD norms or some other international or national legal requirements); escalation of a problem or problems in need of solution; new developments representing opportunities for more sustainable approaches; or opportunities provided through international donors, etc.

Progress towards the ICZM Protocol in the Target Countries

¹⁵ UNEP/MAP-PAP/RAC, GWP-Med and UNESCO-IHP, (2015). An Integrative Methodological Framework (IMF) for coastal, river basin and aquifer management. Strategic Partnership for the Mediterranean Sea Large Marine Ecosystems (MedPartnership). Split, Croatia.

Of the target countries, only four (Albania, Lebanon, Montenegro and Morocco) have currently ratified the ICZM Protocol. However, formal ratification of the Protocol is not in itself a simple indicator of progress towards ICZM.

ox 1 An Integrative Management Framework (IMF) for land, river basin and aquifer management in the coastal zone

The IMF was developed within the GEF UNEP/MAP MedPartnership project as a tool to promote integrated approaches for implementation of the SAPs and NAPs. The IMF and its operational guidelines – produced by GWP-Med, PAP/RAC and UNESCO-IHP – are intended to:

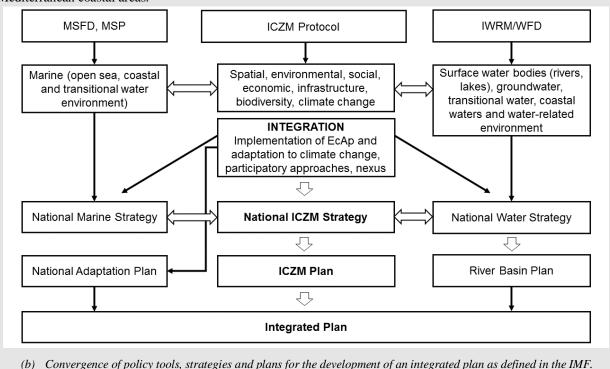
- identify possibilities and solutions for converging coastal, river basin, aquifer and groundwater management, considering also the implementation of the ecosystem approach;
- integrate climate change considerations as cross-cutting issues throughout the planning and implementation processes in coastal zones; and
- support an active involvement of stakeholders and of the general public in the planning and management of coastal zones.

The IMF identifies the key sectoral and spatial dimensions within which intergration must be defined and sets out the methodology to achieve this. The



(a) The coastal zone showing the ICZM Protocol boundaries, groundwaters and waters defined by the Water Framework Directive (WFD) (Credit: Brian Shipman, PAP/RAC)

methodology was applied to the development of ICZM plans in three coastal areas in the MedPartnership, to demonstrate the simultaneous consideration of marine spatial planning, ICZM, integrated water resources management and climate change adaptaion in the development of truly integrated management plans for Mediterranean coastal areas.



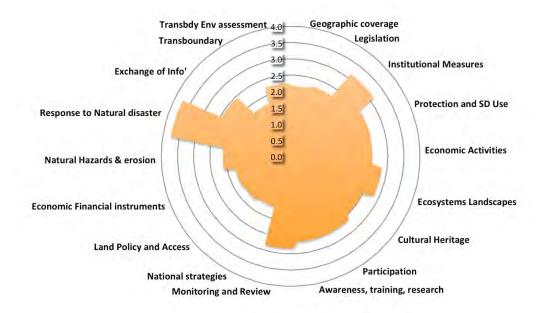
All the countries have existing legislation, such as setback zones and spatial planning that are compliant with or complementary to the requirements of the Protocol. Similarly, practical implementation, such as coastal agencies, plans and strategies are compliant with or complementary to the various Articles of the Protocol. Where ratification has taken place, the transposition of the Protocol into domestic law and its implementation also varies from country to country.

The recent history of many of the target countries has been characterized by political changes and instability. Despite these instabilities, existing legal frameworks and expertise exist on which to build a foundation for ICZM. In the Balkans, ICZM progress has been accelerated by the impending or potential accessions to the EU. All target countries with the exception of Libya have worked closely with PAP/RAC and other Mediterranean focal centers to build capacity and to implement ICZM projects.

Although therefore the overall picture of progress towards the implementation of the Protocol is uneven, the desire to progress and implement the Protocol is broadly positive across the target countries, the main obstacles being the lack of financial and human resources.

The radar diagram in Figure 36 indicates the mean overall baseline of progress across the target countries. The scale of 1-4 Orders is based on the measure of "Orders of Outcome" framework originally developed by the US Environmental Protection Agency, and has been expanded and further developed for assessing the impacts of integrated coastal management (Olsen, 2003) and integrated coastal and watershed management. The orders below have been assessed as a baseline for each of the target countries.

- The First Order looks at the outcomes necessary to create an enabling framework for ICZM the preconditions required to successfully prepare and implement. Generally, these will be related to governance, such as the legal, policy and governance structures (e.g. primary legislation, guidance, implementing authorities, management bodies etc.) in place.
- The Second Order assesses changes in behavior of target user groups and key institutions with respect to the coastal areas and their resources that occur during the implementation of ICZM.
- The Third Order considers practical results and benefits of an ICZM plan and/or its process. Simply, are there measurable outcomes such as improved quality, reduced conflicts, more efficient financial investment, and sustainable levels of exploitation of individual resources?
- The Fourth Order looks at the extent to which ICZM has contributed to the sustainable development of the coastal environment and its resources. This can be summarized as the "tipping-point" at which the "push" of ICZM as a means of resource management moves to the "pull" of ICZM as standard practice. These are likely to be more long-term, high-level in nature, integrated with ecosystem-based approach objectives embedding the outputs of the preceding Orders as Outcomes.



Fi ure 6 Mean overall baseline of progress across the target countries of Child Project 2.1, with respect to integrated coastal management and integrated coastal and watershed management

The broad picture across the target countries can be summarized as follows:

- Basic building blocks for environmental protection, in terms of institutions and legislations are
 largely in place. The protection mechanisms for ecosystems and landscapes in the form of protected
 areas are relatively well developed, and all countries are signatories to the numerous international
 environmental conventions. However, the quality of enforcement/implementation is not measured
 here
- Institutional coordination in coastal management varies considerably across the countries; ranging from closely integrated under the direction of a central ICZM or sustainability committee, to the traditional "silo" sectoral structures.
- Many countries see spatial planning as a key tool to help achieve ICZM, however this field is generally undeveloped or poorly implemented.
- In contrast to environmental protection, the level of positive practical management and intervention is low. There have been numerous ICZM projects, many of which were carried out in partnership with international agencies and programs including MedPartnership. As projects these activities were however time limited, and the degree to which their outcomes were embedded is not quantified. They provide however a baseline experience in which innovative methodologies were piloted and awareness raising approaches were tested.
- Most countries recognize the need for, or have plans for, coastal adaptation to climate change, and for disaster response.
- One country (Montenegro) has fulfilled the requirement for a national ICZM strategy. Egypt has prepared a draft strategy in 2010. Furthermore, preparatory work, or political commitment towards a national strategy is evident in a number of the other target countries.
- Transboundary activity is limited, reflecting in part, critical political problems such as conflict or instability in neighboring countries, as well as practical/resource difficulties.
- Public and stakeholder participation varies significantly. At the national level all countries are committed to achieving international norms on participation and legal rights to representation in decision-making. Whereas, at the local level, participation is significantly improved through the

country activity in ICZM projects such as CAMPs (Coastal Area Management Programmes), supported by PAP/RAC.

The actions of this Component of the project will geographically extend to the spatial components of the Source-to-Sea continuum: basins/aquifers, coastal and marine zones. Planning documents, like National ICZM Strategies and ICZM Plans will be developed, using to the maximum possible extent the IMF, in three countries selected through the consultations with beneficiary countries held during the project design phase: Egypt, Lebanon and Morocco. In the remaining six countries of the project, activities supporting ratification and implementation of the ICZM Protocol, including awareness raising and capacity building activities will be implemented.

The Component will support the implementation of comprehensive ICZM approaches, including:

- Preparation, adoption and support to implementation of gender sensitive National ICZM Strategies, or coastal plans, marine spatial plans and plans focused on coastal resilience to Climate Variability and Change adopting the Integrative Methodological Framework (IMF) developed under MedPartnership;
- Translation of intrinsic environmental vulnerabilities (ecosystems, climate, and groundwater) into Coastal Zone Use Capability or suitability maps and related guidance;
- Use of ICZM tools and instruments;
- Capacity building activities for ICZM, MSP and adaptation to climate variability and change (all project countries).

The Component aims at reaching a total of 12,500,000 hectares of coastal landscapes and seascapes under improved management by implementing comprehensive ICZM planning and approaches in four project countries, at reinforcing the capacity of at least 300 country experts and administrators in the implementation of ICZM practices and involving coastal populations in raising awareness activities.

<u>Expected Outcome 1</u>: Coastal zone sustainability in beneficiary countries enhanced through the expanded compliance with the ICZM Protocol and the adoption of national ICZM strategies, coastal plans and instruments, and improved gender equality.

Output 1.1:

Multi-stakeholders' consultations on ICZM Protocol ratification and implementation (Algeria, Egypt, Lebanon, Morocco and Tunisia).

Activities:

1.1.1 Development of the materials for the consultations in support of ICZM Protocol ratification/implementation

Materials for the consultations developed in the previous PAP/RAC projects (including the GEF MedPartnership) will be upgraded and extended. Particular attention will be dedicated to the use of coastal space through the recent work on the land use and land use change analysis. In the framework of the UN Environment/MAP's Ecosystem Approach (EcAp) initiative, an Integrated Monitoring and Assessment Program (IMAP) is under development. In addition to its 23 Common Indicators, there are four Candidate Common Indicators, including one dedicated to land use change. The land use indicator aims to support implementation of the ICZM Protocol, particularly related to the balanced allocation of uses, preserving open coastal space, securing setback zone, avoiding urban sprawl by limiting linear extension of urban development including transport infrastructure along the coast and securing ecosystem health. These objectives are among the most important ones of the ICZM Protocol. Being a Candidate Common Indicator, the land use indicator is still in a testing phase. The aim of PAP/RAC is to develop

this indicator as a Common Indicator and to assist its monitoring at the whole of the Mediterranean coastal zones. Land use, as well as land use change, may also be used as the indicator for coastal artificialization and for coastal resilience. This work may also provide inputs for protection of the coastal aquifers allocated in the coastal zone. Further work on this methodology will be undertaken in the framework of this activity.

Through this work, particular attention will be dedicated to the setback zone, defined by Article 8 of the ICZM Protocol. This article is one of the most important ones since it promotes multiple benefits, including the establishment of the setback zone as a "no-regret" measure for adaptation to climate change, preserving important natural habitats and landscapes, but also providing an important economic resource for the coastal population (PAP/RAC, 2007). In addition, this article may also represent a tool for protection of the coastal aquifers.

1.1.2. Support for the implementation/ratification of the ICZM Protocol

An estimation of the impacts of the ratification/implementation of the ICZM Protocol will be prepared for three countries (Egypt, Lebanon and Morocco), as a support to the Governments for ratification/implementation of the ICZM Protocol. During the project preparation phase, several countries requested support with an analysis of their legal framework compared to the requirements of the ICZM Protocol, and in particular related to water management. In these countries (Algeria and Tunisia), additional analysis of the legal and institutional framework will be implemented. This work will be tailored to the unique context of each country, and will take into account particularly the national legal framework related to environment, water, aquifers, spatial planning and maritime public domain. Particular attention will be dedicated to the legal framework for implementation of the Article 8, the so-called "setback article".

An analysis of land use and land use change will be carried out in seven countries where this analysis is not already available or foreseen in other ongoing initiatives. In the context of Activity 1.1.2, a detailed analysis of land use and land use change will be implemented, preferably with the support of experts in the countries concerned, in Albania, Algeria, Egypt, Lebanon, Libya, Morocco and Tunisia. In Libya, the MedOpen module on land use change analysis (output 1.4.3) will be used for this purpose.

In Montenegro, a detailed land use analysis has already been prepared in the framework of a completed CAMP project, and in BiH, this analysis is foreseen in an ongoing Coastal Area Management Plan (CAMP) project.

1.1.3 Five national consultations in support of ICZM Protocol ratification

Results of the Activity 1.1.2 will be presented at the five national consultations: in Algeria, Egypt, Lebanon, Morocco and Tunisia. The key coastal stakeholders, including those whose activities impact the coastal zone (its terrestrial and marine areas), will be on board for the national consultations.

1.1.4 Implementing three sub-regional trainings in support of ICZM Protocol implementation

Three sub-regional trainings on legal and technical aspects of the ICZM Protocol will be organized during the project. Trainings will consist of two parts. The first is related to the interpretation of the legal aspects of the ICZM Protocol. The second is more practical in nature, related to land use and land use change analysis with a view to the fulfilment of the Protocol requirements, particularly related to the balanced allocation of uses, preserving open coastal space, securing a setback zone, avoiding urban sprawl by limiting linear extension of urban development including transport infrastructure along the coast and securing ecosystem health.

1.1.5. Development of the conceptual framework for coastal observation.

Article 16 of the Protocol on ICZM to the Barcelona Convention (UNEP/MAP/PAP, 2008) recognizes that monitoring and observation mechanisms and networks are crucial for the preservation of the Mediterranean Sea and Coasts. Activity 1.1.5 will complement the work undertaken by Contracting Parties to implement IMAP at the national level in the framework of the Ecosystem Approach Process in the Mediterranean, by identifying the necessary monitoring parameters to measure the progress towards good environmental status (GES) of the coast. This activity will complement the IMAP indicators with the land part and result in a proposal for a conceptual framework for coastal observation in all Mediterranean countries.

As a first step, a desk study will be conducted to evaluate the state of the art of existing national capacities, gaps in data, knowledge and capacity, as well as the concerns of countries regarding development of a conceptual framework for coastal observation. Next, two workshops will be organized (one in English and one in French) for the relevant stakeholders from the participating countries (those responsible for coastal observation and monitoring) to present the findings of the desk study, including regional trends and potential avenues for future collaborations. The workshops will also provide an opportunity to collect countries' views on how to sustain and further develop this framework, including their technical and financial needs.

The results of the desk study and the needs expressed by countries during the workshops will be consolidated in a report that can be used as a justification for requests from the countries for additional support in this domain, including through resources available for the development of knowledge tools foreseen in the MedProgramme Knowledge Management Strategy (Annex S), executed through Child Project 4.1.

Output 1.2:

Inter-Ministerial Coordination mechanisms for coastal management in place

Activities:

1.2.1 Establishment or enhancement of Inter-Ministerial Coordination (IMC) frameworks

Terms of reference for the establishment or enhancement of Inter-Ministerial Coordination (IMC) frameworks will be developed in four countries (Bosnia and Herzegovina, Egypt¹⁶, Lebanon and Tunisia) and submitted for approval to the responsible national authorities. At least one national meeting will be organized per country to present the proposed terms of reference. The main task for the IMCs will be the ratification of the ICZM Protocol (Bosnia and Herzegovina and Tunisia) or development and adoption of the National ICZM Strategy (Lebanon). For additional information on existing coordination mechanisms, please refer to the sub-heading "Interministerial Coordination Mechanisms in the participating countries" in Section 2B: Baseline Scenario: Project Countries.

1.2.2 Organizing national consultations to launch IMCs

At least three national consultations will be organized with the aim to launch effective Inter-Ministerial Committees (IMC) in relevant countries. Materials prepared under Activity 1.1.2 will be presented to high-level decision makers and appointed members of the IMCs. For at least one IMC meeting, the products of Activity 1.5.1. to raise awareness on the need to build coastal resilience will be used.

Output 1.3:

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¹⁶ The creation of an IMC mechanism for Egypt will be untaken in the context of Activity 1.3.1.

2 National ICZM Strategies (Egypt and Lebanon)/ 2 ICZM Plans developed and submitted for adoption (Montenegro and Morocco) 1 Integrated Management Plan prepared according to the IMF (Damour, Lebanon)

Activities:

1.3.1 Two national ICZM Strategies developed and submitted for adoption (Egypt and Lebanon)

A National ICZM Strategy, as defined by the ICZM Protocol's Article 18 is to be: "based on an analysis of the existing situation, and shall set the objectives, determine priorities with an indication of the reasons, identify coastal ecosystems needing management, as well as all relevant actors and processes, enumerate the measures to be taken and their costs as well as the institutional instruments and legal and financial means available, and set an implementation schedule."

A successful National ICZM Strategy can only be developed in a close collaboration with the national authorities, supported with the multi-disciplinary team of experts, and by using a wide participatory process from the onset of the strategy drafting. The success of a National Strategy is characterized not only by the quality of the proposed solutions, but also by the degree of its implementation. Although the implementation is fully dependent upon the executive powers within the countries, the prospects for successful implementation can be greatly increased by ensuring a high-quality development process. This entails the engagement of all levels of government involved with the coast. At the same time, the key stakeholders must be on board for preparation of the National ICZM Strategy, including those responsible for management of coastal resources, or those having activities under their jurisdiction that impact the land and/or marine areas of the coastal zone. Implementation of the National ICZM Strategy is a long-term task for many actors of the government; therefore, wide ownership and assertive leadership are crucial for its success. For this reason, although the analytical preparatory work may be led by an international organization, the key leaders from the very beginning of the preparation of the National ICZM Strategy will be the national bodies with the executing powers and with the ambition to lead the Strategy's implementation.

The National ICZM Strategies will be prepared through workshops and consultations organized throughout every stage of the document's development. In order to design the appropriate governance mechanism, particular attention will be dedicated to the legal and institutional frameworks. Constant efforts will be devoted to the identification of potential barriers to the uptake of ICZM instruments, and approaches for the development of the National ICZM Strategies will be adapted accordingly. The development of the Strategies will also involve the Inter-ministerial Committees. This activity will create the enabling environment for governments to carry out planning activities in a more holistic and integrative manner, to consider proactive approaches and to contribute to the sustainable development of their coasts. Capacities of the national and sub-national institutions will be enhanced throughout the process.

Rivers/surface waters transcend and connect the coastal areas with inland areas; many of the root causes of the effects manifested in these waters can be traced to the inland areas. In this regard, the application of the source-to-sea approach and the use of the IMF becomes relevant in the preparation of the ICZM strategy. For example, the application of this approach is impeded by the political realities stemming from the transboundary character of the Nile in the case of Egypt¹⁷. However, impediments of this type and intensity do not exist in the case of Lebanon and hence the development of the plan will incorporate source-to-sea considerations and realities.

1.3.2 One ICZM Plan developed and submitted for adoption (Morocco)

¹⁷ The government of Egypt will provide some updated information during the inception phase of the project. GEF6 CEO Endorsement Template: Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection (CP 2.1)

An ICZM Plan, or Coastal Plan is defined by ICZM Protocol's Article 18 as: "self-standing or integrated in other plans or programs, specifying the orientations of the national strategy and implementing it at an appropriate territorial level, determining, inter alia and where appropriate, the carrying capacities and conditions for the allocation and use of respective marine and land parts of coastal zone." Activity 1.3.2 focuses on the development of the ICZM Plan, and on its submission for adoption. The process of the development of the Plan is presented in Figure 37 below, as it was defined and tested in the MedPartnership project. In the scoping/establishment stage, the key challenges for achieving the vision of the sustainable future will be articulated, in view of their further study within the analysis stage. Particular attention will be dedicated to surface water and aquifers as key coastal natural resources (in addition the coastal space itself), and to gender roles. Key obstacles for the sustainability of coastal development will be analyzed to reveal their root causes, followed by the definition of solutions for sustainable coastal development and for enhancing the resilience of the coastal zone. Particular attention will be dedicated to the establishment of the governance mechanism as a key prerequisite for the Plan's implementation.



Fi ure 7 ICZM PROCESS & CLIMAGINE

This activity presents multiple opportunities for synergistic interactions with other Child Projects of the MedProgramme, namely the Special Climate Change Fund project "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas" (SCCF Project) and Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus".

In the SCCF Project, a set of recommendations will be prepared to mainstream climate change adaptation strategies in the ICZM Plan in Morocco that is envisaged under Activity 1.3.2 of the Child Project 2.1. The two projects will benefit from having a common set of stakeholders in Morocco for both sets of activities as well as a shared scientific and socioeconomic knowledge base for the design and execution of activities.

At the same time, opportunities for synergies with Child Project 2.2. will be explored regarding the integration of the Water-Food-Energy-Ecosystem (WFEE) nexus approach in the ICZM Plan that will be developed for Activity 1.3.2 of the Child Project 2.1. The level of synergies will be defined by the readiness of the responsible institutions of the WFEE sectors to constructively contribute to the development of the ICZM Plan.

1.3.3 Implementing the participatory methodology Climagine as a support to the development of the National ICZM Strategies and ICZM Plans.

Climagine is a methodology developed under the MedPartnership for systemic and prospective analysis of sustainability taking into account possible future scenarios of vulnerability and adaptation paths in the coastal areas. The methodology is designed to involve all relevant local stakeholders to integrate local knowledge, preferences and solutions in the planning documents, as well as to build stakeholders' ownership of the process. Climagine will be implemented in parallel with Activities 1.3.1, 1.3.2 and 1.3.5 (development of the ICZM Strategies and Plans) through four steps: analyzing the context; identifying sustainability indicators and assessing their values; modelling and exploring indicators and scenarios of future evolutions; and participating in designing solutions and prioritizing actions for reaching sustainable coastal development in the project zone.

1.3.4 One Integrated Management Plan (IMP) to be prepared in collaboration with all partners, according to the IMF methodology (Damour, Lebanon)

As stated in the ICZM Protocol, an ICZM Plan may be self-standing or integrated in other plans. An Integrated Management Plan (IMP) for an area of the Damour region will be prepared according the Integrative Methodological Framework (IMF) and through the collaborative efforts of all partners of the Child Project 2.1. Rather than preparing separate management plans for the coastal zone, surface water, and aquifers, one unique plan will be designed following the "source to sea" approach. In the framework of this activity, land use capability mapping will also be implemented.

The IMP will be prepared for an area encompassing (i) the municipality of Damour, (ii) the Damour River Basin and its adjacent coastal area, and (iii) the Damour Coastal Aquifer. A detailed description of this area is set forth in Annex O¹⁸.

1.3.5 One ICZM Plan developed and submitted for adoption (Kotor Bay, Montenegro)

The development of a local ICZM plan that mainstreams climate change adaptation is identified as one of the priorities in Montenegro's National ICZM Strategy. Using the same approach described in Activity 1.3.2 (development of an ICZM Plan in Morocco), an ICZM Plan will be developed for one site in Montenegro according the ICZM Protocol Article 18, also in synergy with Activity 2.1 of the SCCF Project. Using the methodology and the process illustrated in Figure 37, an ICZM plan will be prepared for the area of the Boka Kotorska Bay (Kotor Bay) in Montenegro. Activities that involve the development of coastal climate change adaptation strategies will be funded from the SCCF Project, while all other priority coastal issues will be implemented with the resources of Activity 1.3.5 of the Child Project 2.1.

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¹⁸ Note: the geographic scope of this activity is subject to modification, based on the expressed priorities and needs of the stakeholders in Lebanon.

Like the interventions foreseen under Activity 1.3.2, this activity also presents multiple opportunities for synergistic interactions with other Child Projects of the MedProgramme, namely the previously referenced SCCF Project and Child Project 2.2.

In the SCCF Project, a set of recommendations will be prepared to mainstream climate change adaptation strategies in the ICZM Plan in Montenegro that is envisaged under Activity 1.3.5 of the Child Project 2.1. The two projects will benefit from having a common set of stakeholders in Montenegro for both sets of activities as well as a shared scientific and socioeconomic knowledge base for the design and execution of activities.

At the same time, opportunities for synergies with Child Project 2.2. will be explored regarding the integration of the Water-Food-Energy-Ecosystem (WFEE) nexus approach in the ICZM Plan that will be developed for Activity 1.3.5 of the Child Project 2.1. The level of synergies will be defined by the readiness of the responsible institutions of the WFEE sectors to constructively contribute to the development of the ICZM Plan.

Output 1.4:

A series of training events on ICZM, Marine Spatial Planning and CVC adaptation developed and implemented

Activities:

1.4.1 Preparation of training material for the MedOpen online training course

MedOpen is an online training program on coastal management in the Mediterranean, with modules currently available on ICZM and CVC. The program is available in English and in French, and in Basic and Advanced Modules. In the framework of this activity, MedOpen will be expanded to include three additional modules: building coastal resilience; marine spatial planning in the Mediterranean; and land use change analysis for the Mediterranean coastal zones.

The level of information, access and the effort needed to complete the program depend on the type of module. The contents of the Basic Modules are available to all users throughout the year, and provide elementary information on the study topic. The contents of the Advanced Modules are more in-depth and available only to registered participants during sessions organized regularly by PAP/RAC. The Advanced Module requires a higher degree of commitment by trainees: in addition to the lectures and additional reading materials, students participate in a simulation exercise and are required to complete a final essay. If their work is evaluated positively, students are awarded the MedOpen ICZM Advanced Certificate.

1.4.2 Implementing advanced online training courses and training events on a yearly basis

Starting from the second year of the project implementation, an Advanced Module will be implemented for different target groups. The newly developed module on building coastal resilience will be launched in the first half of the second year of the project implementation, while the module on the land use change analysis will be launched by the end of the second year. During the third year of the project implementation, the module on marine spatial planning in the Mediterranean will be implemented. All training opportunities will be announced through the GEF network and PAP/RAC regular channels. For the Advanced Module, the number of participants will be limited to 25. For each module at least one lecturer will be secured to lead the course and to evaluate students' final essays. Participants from the project countries will be given priority in accessing the Advanced Module.

1.4.3 Face-to-face training to support MedOpen module on land use and land use change analysis

In addition to the on-line format, some trainings will be supported with an on-the-ground final session. This has been demonstrated in the MedOpen 2018 in Algeria and will be replicated in the third year of the project implementation. In collaboration with the national partner, support will be provided to complement the advanced on-line course with the live, face-to-face sessions. This will be organized for the module on the land use and land use change analysis, where the partner would be the organization in charge for future monitoring of this important indicator. Land use change is a Candidate Common Indicator for IMAP, so the GEF MedProgramme Child Project 2.1 is expected to contribute to improving this indicator so that it becomes one of the indicators proposed for regular monitoring. Through MedOpen the materials will be prepared to be used for all those in the national institutions who may be in charge of its monitoring in the future.

Output 1.5:

Raised awareness on the approaches promoted by the project (with attention to the engagement of private sector).

Since 2007, the Mediterranean Coast Day has been celebrated with an awareness raising campaign culminating in a final event on 25 September of each year. This event honors the beauty of Mediterranean coasts and calls people to become engaged in the management and protection of these areas. The awareness raising campaign for the Mediterranean Coast Day is based on the Mediterranean Awareness Raising Strategy (MARS), and already has an established visual identity, as well as a series of media products that may be reutilized every year. Three central celebrations will be organized in the three project countries (Albania, Algeria and Morocco), while additional activities will be supported in all project countries that express interest in organizing events.

Activities:

1.5.1 Producing materials for awareness raising campaigns

Activity 1.5.1 will involve the production of new outreach materials tailored to the specific themes of three awareness raising campaigns that will be organized in three countries during the project. Materials to be produced include photographs for exhibitions, press releases, short videos, posters, stickers, brochures, leaflets, etc.

The three themes for the campaigns will be Coastal Resilience, Coastal Aquifers and Women in Coastal Management. The location of the final event for the Coast Day celebrations will be chosen two years before the target year.

1.5.2 Implementing three awareness raising campaigns with the central themes of Coastal Resilience, Coastal Aquifers and Women in Coastal Management

Three campaigns to promote the Coast Day celebrations will be organized during the project life span. Each campaign will highlight a different dimension of coastal zone management. The themes chosen for the three forthcoming campaigns are: Coastal Resilience, Coastal Aquifers and Women in Coastal Management.

The campaign on Coastal Resilience will be implemented during the second year of the project. The activities for this include the organization of a high-quality photo exhibition in a public space, an international conference, as well as a number of promotional activities in city chosen for the final celebration event, such as school contests, a theatrical work, sailing, kayaking or biking expeditions or competitions, local or organic food fairs, etc. For the occasion of the Coast Day, an Ambassador for the Coast will be appointed.

Activities for subsequent awareness raising campaigns will be designed based on the expressed needs of the relevant stakeholders involved in the campaigns and in view of building on effective outreach and communication strategies undertaken for past campaigns.

1.5.3 Participation in dissemination and awareness raising activities at the regional and global levels

The progress and results achieved through Component 1 will be showcased for replication purposes at both the regional and the global levels:

- Regional level: Methodologies for ICZM Strategies and Plans design and implementation, and the examples of Albania, Algeria and Morocco will be disseminated regionally through the activities and knowledge management tools developed under Child Project 4.1.
- Global level: Participation in IW LEARN activities and events, including International Waters Conferences; scientific papers presented and published in major journals /conferences.

Com onent 2 Mana ement of Coastal Aquifers and Related Ecos stems

Contrary to all other water bodies, aquifers are located in the subsurface and visible only through the eyes of science, that is, hydrogeology. As a consequence, while in all countries of the world groundwater is being used intensively, in many cases this takes place in the absence of a full understanding of the nature and characteristics of the resource, including of its occurrence in defined geological permeable rock formations known as "aquifers". Moreover, groundwater resource boundaries, or aquifer boundaries, are often very poorly known and so many aquifers remain unknown or only partly recognized as separate, often unconnected, entities.

This is particularly true for coastal aquifers, whose special nature and interlinkages with the marine environment are often not recognized by countries and local administrators. Lack of recognition increases their vulnerability to anthropogenic pressures. Hence, the need to make coastal aquifers "visible" and recognized by the countries where they are located.

Although not as obvious as river discharges, continental groundwater also discharges directly into the ocean wherever a coastal aquifer is connected to the sea. Within the last few decades, recognition has emerged that groundwater discharges into the sea, or Submarine Groundwater Discharges (SGD), may be both volumetrically and chemically important. Hydraulic gradients and transmissivity are the main factors that determine the flux of SGD. Without the benefit of measurements, one may predict that land-derived SGD fluxes would concentrate in areas of high permeability (karst), high relief near the coast; areas without well-developed river systems (some large oceanic islands); and regions with high groundwater recharge rates (e.g. humid tropics).

The flux of terrestrially-driven groundwater through coastal sediments is becoming recognized as an important mechanism for transferring material from the land to the ocean. This process may affect the biogeochemistry of estuaries and the coastal ocean through the addition of metals and carbon, and most of all nutrients which can have significant effects on water quality in estuaries, as they cause eutrophication of near-shore waters. One of the main reasons for this increase in nutrients loads to the sea is the increasing population density and changing agricultural practices in coastal areas. The ecological and economic impacts of eutrophication have been substantial in many coastal regions, and this demands a better understanding of the contribution of groundwater-derived nutrient fluxes.

In addition to SGD, seawater intrusion is the other process of connection between the fresh groundwater and the saline groundwater coming from the sea. Monitoring of the position and understanding the temporal and spatial dynamics of this interface is also a key when dealing with coastal aquifers

management. In fact, seawater intrusion is the biggest threat to coastal fresh groundwater resources. Intrusion is triggered by multiple factors, such as sea level rise as a consequence of climate change, or over-exploitation of groundwater resources due to increasing populations in coastal areas. In any case, the fresh water-salt water interface dynamics reflect the status of coastal fresh groundwater resources, also connected to SGD dynamics.

It is hence evident that to understand coastal dynamics and assess the state of coastal and marine resources and ecosystems, the interactions between coastal aquifers and the marine environment must be taken into full consideration. They should also be reflected in Integrated Coastal Zone Management (ICZM) and marine protection strategies and plans.

The goal of Component 2 is to implement sustainable management policies and practices in the five coastal aquifers considered of priority importance by the countries and in the coastal ecosystems related to them, while conducting sub-regional trainings and national dialogues on conjunctive surface and groundwater management solutions in coastal areas. This Component will support the implementation of actions foreseen in the two Sub-Regional Action Plans developed under the MedPartnership (Adriatic Basin; and South, Central and Levantine Basin) on the sustainable management of coastal aquifers and groundwater-related ecosystems agreed upon by the countries as part of MedPartnership. These actions will be implemented in five priority aquifers identified through the regional consultations conducted during the preparation phase of Child Project 2.1 (Figure 38). These aquifers are:

- Albania and Montenegro Buna-Bojana transboundary coastal aquifer
- Egypt North West coastal aquifer
- Lebanon Damour coastal aquifer
- Morocco Rhiss-Nekkor coastal aquifer
- Tunisia Ras Jebel coastal aquifer

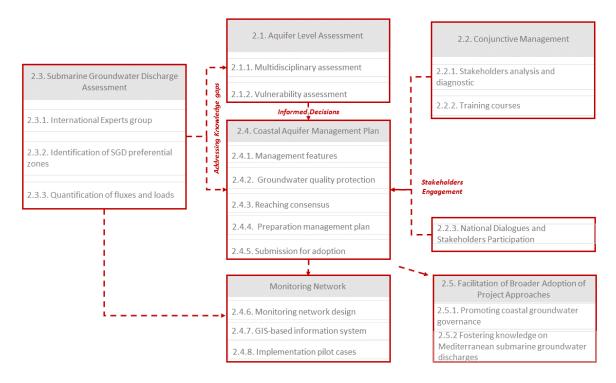


Fi ure 8 Location of the five priority aquifers for Component 2 of Child Project 2.1 (UNESCO-IHP 2015)

The actions that the project will implement under Component 2 will include the further improvement of the inventory and characterization of coastal aquifers produced by MedPartnership, through the following activities:

- In-depth systematic aquifer assessments (based on TWAP Level 2¹⁹), the assessment of seawater intrusion and aquifer salinization, mapping of water and land uses and inventorying wells, estimating abstractions and related energy consumption, and conducting sex-disaggregated data collection and gender analyses, amongst others;
- The identification of major submarine groundwater discharge zones, and assessment of flows and contaminant loads (all project countries);
- Integrated assessment including a systematic mapping of groundwater vulnerability in the coastal zone, using methods accounting for both vertical and horizontal vulnerability, and defining local land uses and human activities compatible with the various classes of vulnerability;
- The assessment and diagnosis of coastal ecosystems related to priority aquifers, and the strengthening
 of management capacity related to ecosystem services and their evolution trends, and on the strong
 relationships existing between groundwater flows and surface waters, wetlands services, and human
 wellbeing;
- Improvement of stakeholder involvement through capacity building and participating workshops and consultations;
- The preparation for adoption of management plans for the five priority coastal aquifers; and
- The design and testing on the ground of modern multi-purpose monitoring networks.

Figure 39 provides a schematic overview of the interactions between the activities of Component 2



Fi ure 9 Schematic overview of the interactions between the activities of Component 2

Com onent 2 Outcomes out uts and acti ities

¹⁹ The GEF Transboundary Waters Assessment Programme (TWAP) established two levels of indicator-based assessments for transboundary aquifers. Level 1 is a baseline assessment of ten core indicators; Level 2 builds on this baseline with an additional ten indicators.

<u>Expected Outcome 2</u>: Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater-related coastal ecosystems.

Output 2.1:

<u>Detailed assessments of the current state of priority coastal aquifers and related coastal ecosystems, vulnerability maps and recommendations for land use planning addressing relevant stakeholders, including private sector, national and local water associations and water users.</u>

Priority aquifers are not necessarily the largest aquifers in a country. In selecting the five priority aquifers to be included in this project, countries have adopted prioritization criteria that included socio-economic importance, degree of threat to services or sustainability, and level of socio-political engagement. The characterization and assessment process of the five priority coastal aquifers will include:

- physical delineation of the system: mapping the groundwater flow regime from natural recharge to discharge zones (thus connecting the landscape with the subsurface system), whilst taking account of major perturbations of human origin;
- socio-economic evaluation of the system: evaluating the importance of the system to the economy and to human well-being, and highlighting systems where groundwater plays a critical role in water supply, irrigated agriculture, industrial production or ecosystem sustainability; and
- assessment of pressures on the system: assessing susceptibility and vulnerability to irreversible degradation (through subsidence, salinization and persistent pollution) or tendency to be associated with land water-logging and groundwater flooding, and identifying any opportunity to create new or enhanced underground water reservoirs.

The results of the characterization and assessment activities will be documented in five Coastal Aquifer Assessment Reports, one for each of the priority aquifers.

Activity 2.1.1: Characterization and assessment of priority coastal aquifers and related ecosystems through the application of a multi-disciplinary indicator-based methodology

This activity aims to provide a comprehensive evaluation of the present status of each of the five priority coastal aquifers and of their interactions with dependent ecosystems. The assessment will consider their multiple dimensions:

- Hydrogeological aspects;
- Environmental aspects;
- Climatic aspects;
- Socio-economic aspects, including gender;
- Legal aspects; and
- Institutional aspects.

This work will build on the multi-disciplinary indicator-based methodology developed by the GEF Transboundary Waters Assessment Programme (TWAP), considering compiled data from (i) existing monitoring networks; (ii) abstraction wells; (iii) physical and chemical surveys; (iv) land use maps; (v) gender surveys (when applicable); and (vi) existing legal and institutional frameworks. The basic methodology will be expanded and adapted to the coastal system specificities and will integrate recommendations and elements from the EU-WFD, the ICZM Protocol, and the Integrative Methodological Framework (IMF) developed under the MedPartnership. The activity will develop indicators adapted to the specific conditions of each priority coastal aquifer, such as seawater intrusion,

submarine groundwater discharges and the interaction with coastal water-dependent ecosystems. Indicators and indexes²⁰ will provide condensed information at aquifer and related ecosystem level, acting as an important communication tool for policy and decision makers, planners and the general public. Numerical modelling will be applied whenever possible to help validate conceptual models, to allow aquifer managers to test interventions before applying them and to evaluate future scenarios.

Activity 2.1.2: Comprehensive vulnerability assessment and associated management recommendations

In coastal aquifers, an assessment of intrinsic vulnerability to contamination must consider not only pollutants that can enter the system infiltrating vertically from the land surface, but also seawater intrusion that can penetrate horizontally through the aquifer. To respond to the need for a tool to account for both potential sources of contamination, a new approach considering vertical and horizontal vulnerability – the Aquifer Comprehensive Vulnerability Mapping (ACVM) method - was developed under the MedPartnership. It features new methodologies for:

- 1. Merging vertical and horizontal vulnerability in coastal areas;
- 2. Mapping horizontal vulnerability associated with seawater intrusion; and
- 3. Evaluating the potential impact of sea level variations.

For the evaluation of vertical intrinsic vulnerability (traditionally associated with pollution infiltration from the surface), there are two approaches: the homogeneous area zoning approach (also known as hydrogeological complex and setting assessment); and the parametric systems approach. The choice of the most appropriate method for evaluating vulnerability is strictly linked to the amount of available data and to their quality and distribution.

In Activity 2.1.2, the ACVM method will be used to evaluate and map the comprehensive vulnerability of the five priority aquifers, taking into account horizontal and vertical vulnerability. For each aquifer, a map will be produced that indicates the vulnerability class (index) of the different portions of the aquifer, thereby delineating areas with higher or lower vulnerability. Additionally, a set of groundwater management recommendations will be established to translate the findings of the vulnerability assessment into practical guidelines. The vulnerability assessments, maps and management recommendations will serve as tools to facilitate decision making by managers of groundwater resources.

Output 2.2:

National Dialogues identifying potential conjunctive management solutions, including stakeholders' training modules designed and implemented.

A key element in groundwater governance is the systematic involvement of stakeholders. This is particularly true in coastal areas, where many human activities interfere with natural active processes at the land-sea interface, and where surface and groundwater resources tend to lose their distinctive characters in the transition to the marine environment, hence requiring conjunctive management approaches. The findings of the Groundwater Governance GEF/FAO/UNESCO/World Bank project recently concluded (2016), have however demonstrated that the role of stakeholders has generally been limited and remarkably passive, due in part to lack of awareness or knowledge in addition to the lack of institutionalized structures for participation.

The activities under this output will attempt to address and overcome barriers preventing the effective engagement of stakeholders, and they revolve around the following elements: (i) information sharing and

²⁰ Indexes: combinations of indicators designed specifically for each case to address complex problems, such as for example assessing resilience to climate change impacts.

dissemination; (ii) capacity building and awareness raising; and (iii) testing mechanisms to facilitate stakeholders' active participation in designing and implementing groundwater management plans.

Stakeholder engagement will be reinforced, along with technical and institutional capacities, through the design and implementation of three training modules on the conjunctive management of surface and groundwater, one module for each of the three sub-regions (Adriatic, Southern and Eastern Mediterranean). The face-to-face training modules will be tailored to the specific needs of national authorities and other multi-sectoral stakeholders who will play a predominant role in the implementation of conjunctive management solutions.

Activity 2.2.1: Stakeholder analysis carried at national level

For this activity, a stakeholder analysis will be undertaken at the national level for each of the five priority aquifers. This is required to identify key actors, assess knowledge gaps, and unravel gender roles and inequalities, and as a basis for the preparation of awareness campaigns, participation mechanisms and events adapted to the socio-economic and cultural context of the areas in question.

As a first step, the stakeholder groups that will be targeted by this activity will be identified. This process will be guided by the Global Diagnostic on Groundwater Governance, carried out as part of the Groundwater Governance project, which identified the following actors as relevant stakeholders in water governance:

- Government organizations responsible for (ground)water management, environmental management or related tasks;
- Public or private water utilities (water supply and sewerage agencies or companies);
- Groundwater users in the domestic, agricultural or industrial sector;
- Government representatives of the different water use sectors;
- Water user associations;
- NGOs:
- Industry, the mining, construction and any other private sectors with a stake in the subsurface or influencing subsurface conditions;
- Academic institutions, research and development organizations, consultants and other representatives
 of science and technology; and
- Schools.

In the case of coastal aquifers, several additional groups of stakeholders need to be considered, among them fisherfolk, the tourism industry, women's associations, and marine and coastal nature conservation entities.

Once the relevant stakeholder groups have been identified, an analysis will be undertaken to determine, amongst other aspects: their roles in coastal and water resources management activities and associated impacts on these resources; their level of knowledge about sustainable approaches to water resources management; technical, financial and institutional capacities to implement actions in support of coastal aquifer management plans; potential entry points for changing behaviors that could lead to wiser use of water resources; barriers to the improvement of environmental management practices affecting coastal water resources; preferred modes of communication with respect to interactions with governments and other stakeholders; and an indication of their willingness to take part in dialogues on the elaboration of aquifer management plans or the preparation of recommendations on conjunctive management. Throughout the analysis, attention will be given to gathering information about the implications of gender in the stakeholder groups and their activities pertaining to water resources management.

Finally, and in accordance with the relevant guidance from the IMF (MedPartnership 2015), a communication strategy will be developed to define how to engage with and disseminate information to the different stakeholder groups. The communication strategy will also consider how to reach the broader public, in order to raise awareness on key messages regarding sustainable management of groundwater resources, and to disseminate relevant assessment results and progress on the development of coastal aquifer management plans.

Activity 2.2.2: Training modules design and implementation

Based on the outcomes of the stakeholder analysis, a capacity building strategy will be designed. The capacity building strategy will be oriented to key stakeholders whose predominant role in the management of groundwater resources could be an obstacle or an asset for the management plan design and implementation. The capacity building strategy will focus on closing knowledge gaps within the community of stakeholders, and on fostering the empowerment of women and gender equality in water stewardship and management.

Next, face-to-face training activities and modules will be designed to focus on aspects relevant for conjunctive surface and groundwater management and enhance a common understanding on key elements such as (i) Basic Groundwater Governance Principles and management tools; (ii) Hydrogeological and socio-economic implications of surface water and groundwater interactions; (iii) Available tools for the conjunctive management of groundwater and surface water; and (iv) Innovative tools (e.g. numerical modelling, isotope techniques) for improving groundwater management.

One training module will be designed and implemented for each of the three sub-regions (Adriatic, Southern and Eastern Mediterranean).

Activity 2.2.3 National Dialogues identifying potential conjunctive management solutions.

Previously identified and trained stakeholders are expected to participate in structured dialogues aimed at identifying conjunctive management recommendations to be included in the priority aquifer management plans. The main objectives of activities under this output will be to create communication and participation mechanisms, to facilitate cooperation with stakeholders and relevant authorities, and to identify a common vision towards the plan. The dialogues will aim at (i) the promotion of conjunctive use of groundwater and surface water, (ii) promoting compliance with basic groundwater governance guiding principles and (iii) the prioritization of climate change adaption strategies. Special attention should be given to the adoption of groundwater – surface water conjunctive management approaches, to solve complex problems like over-allocation, over-exploitation, and groundwater salinization. Sustainability of groundwater-dependent ecosystem should be given due recognition when discussing water allocation and usage prioritization.

Five National Dialogues will be organized to identify potential conjunctive management solutions, one for each of the five priority aquifers.

The National Dialogues are designed to provide a means for a broad range of stakeholders within a country to come together and learn, discuss and agree (or take steps toward agreement), on environmental and sustainability issues across the board, in view of mainstreaming environment values and compliance with Multilateral Environmental Agreements (MEAs) in national decision making.

The participants in the National Dialogues will include government ministries and agencies, non-governmental/civil society organizations, communities, academic and research institutions and the private sector, as well as partners and donors.

In this activity, participants will first be informed about the main findings of the aquifer assessment (Output 2.1) and will then be guided through a facilitated dialogue aimed at identifying and agreeing upon solutions to enhance the aquifer's sustainability and its resilience to climate change and variability. These may include policy, legal and institutional reforms, adoption of new practices such as water reuse and managed aquifer recharge, new land use planning instruments accounting for aquifer vulnerability, etc.

Output 2.3:

National Assessments of Submarine Groundwater Discharges and of Marine-Freshwater Interactions.

The concept of Integrated Coastal Zone Management (ICZM) implies the management of all water bodies in coastal areas as a unique interconnected system. Therefore, when addressing coastal aquifers management, it is necessary to consider their connection to coastal marine ecosystems through submarine groundwater discharge (SGD).

Global statistical estimates indicate that SGDs are on average 0.5% of river flow; however, contaminant loads of SGD can be locally important. While inputs from major rivers are gauged and well analyzed (thus allowing relatively precise estimates of freshwater and contaminant inputs to the ocean), assessing groundwater fluxes and their impacts on the near-shore marine environment is much more difficult, as there is no simple means to gauge these fluxes to the sea. Despite their unquestionable contribution to coastal livelihoods and economy, shallow marine coastal environments are nevertheless subjected to all types of environmental pressures. These include pressures related to the presence of large urban populations and intense agricultural activities involved fertilizer use and/or livestock rearing that can put these coastal environments at high risk for coastal eutrophication, leading to high-biomass algal blooms, depletion of oxygen, increased turbidity and changes in community composition.

Because of its environmental and economic implications, understanding of the volume and composition of the SGD is a topic of growing interest, addressed in this project through a comprehensive regional assessment. The activities under this output aim to create a baseline assessment of submarine groundwater discharge at the sub-regional level in the South and Eastern Coasts of the Mediterranean. The results should allow identification of discharge zones along the national coasts and quantify fluxes at selected locations. The qualitative and quantitative information gathered will be used to assess groundwater dependency of coastal ecosystems and will facilitate design of ICZM plans. The assessment will contribute to global research on submarine groundwater discharge occurrence and hence global water balance observation.

An Assessment on SGD and Marine-Freshwater Interactions will be conducted for each of the countries participating in Child Project 2.1.

Activity 2.3.1: Creation of an SGD international expert advisory group

Methods for SGD detection and quantification are constantly evolving. The detection and quantification of SGD at a large scale is a novel task that will be undertaken in this project, and will benefit from the involvement of international experts with specialized experience in this domain. In fact, this project could serve as a reference in the field of SGD research, given the scale and actors involved.

In this activity, UNESCO-IHP will create, lead and administer an SGD international expert advisory group focused on the Mediterranean, for the duration of Child Project 2.1. The approach will be inclusive, with participation from the civil society (local groundwater associations and coastal resources users). As such, citizen-science will be considered with the aim of empowering local community. Overall, the creation of an advisory group of experts will boost local capacities and knowledge transfer among

scientists, society and administrations. creation of an advisory group of experts will boost local capacities and knowledge transfer among scientists, society and administrations.

The advisory group will involve, amongst others, international organizations and research groups with experience in the field of SGD, such as:

- Intergovernmental Oceanographic Commission (UNESCO IOC)
- Scientific Committee on Oceanic Research (SCOR)
- The European Space Agency (ESA)

The advisory group will be responsible for organizing national workshops promoting knowledge transfer and capacity building on SGD assessment; reviewing and recommending state of the art techniques for the identification of submarine groundwater discharge zones and their quantification, considered most adequate for the scale and purpose of the project; and organizing a Mediterranean Regional Conference on SGD. Selected local stakeholders from the pilot aquifers will also be invited to participate in the Mediterranean Regional Conference on SGD.

Activity 2.3.2: Identification of SGD preferential zones at national level

Submarine groundwater discharges do not occur homogenously along the coast. Depending on the coast morphology and lithology, SGD can occur close to the coast or far way, in localized sources or along wide areas of the seafloor. Thus, the first step towards a SGD assessment is to detect where this phenomenon is occurring.

There are few reviews or inventories of groundwater discharge to the sea at the global scale. Existing reviews concentrate on the analysis of scarce direct measurements, done with different techniques, and difficult to extrapolate to a wider scale. At the regional scale, Rodellas et al. (2015) provided an overview of SGD contribution to the Mediterranean Sea employing radium (Ra) and radon (Rn) isotopes. Recently, Sawyer, David, and Famiglietti (2016) presented a continental estimate using continental scale hydrography data and climate data sets to derive the submarine groundwater discharge component.

Temperature has also emerged as a proxy for submarine groundwater discharge detection at large scales by means of satellite imagery or thermal infrared images. The project will most likely adopt this method since this kind of imagery is readily available for the coastal areas of Southern and Eastern Mediterranean. Special attention will be paid to the five priority aquifers areas.

Activity 2.3.3: Quantification of fluxes and contaminant loads at selected areas (Priority aguifers)

SGD quantification is most often derived indirectly from water balances and flow rates calculated from regional groundwater level gradients. Indirect measurement techniques include natural tracers, like radium (Ra), radon (Rn), salinity, silica or methane; and groundwater temperature, which can be used as a geophysical tracer to estimate groundwater discharge. Direct methods for quantifying SGD include seepage meters and multilevel piezometers, which can be installed to monitor groundwater potential at different depths.

The first step of Activity 2.4.3 will be to identify the most suitable quantification methods and locations to produce estimates of SGD fluxes and contaminant loads. In principle, Ra and Rn isotopes could be used to estimate SGD fluxes whether or not the SGD zones are accessible. Ra and Rn sampling campaigns inland and off-shore should be complemented with major ions in order to draw information on loads from groundwater to the sea. Whatever technique is used to measure SGD, it will be complemented with hydrogeological models, which will help to up-scale measurements, and validate conceptual models. This task is especially important when discussing nutrients loads, since nutrients are extremely reactive to changes in lithology or salinity.

Activity 2.3.4 Sensitization of coastal communities and stakeholders

In coordination with IW:LEARN activities and in parallel with the appraisal of SGDs, dissemination campaigns on the nature and existence of SGDs will be delivered in all project countries.

Output 2.4:

<u>Priority aquifers coastal management plans produced including design and field testing monitoring multi-</u>purpose networks and protocols.

Any plan to manage groundwater must address aquifer systems as whole. For this, management approaches must address both the aquifer and the groundwater resources present within. In other words, both the container (the aquifer and its connected landscape) and its content (the availability, quality and use of groundwater). It is important that aquifer systems are preserved in good condition, so that recharge is optimized, storage is maximized and quality is not jeopardized. At the same time, groundwater resources should be managed to avoid serious long-term depletion and to minimize the risk of serious pollution. Priority aquifers systems, which are treated as groundwater management units, should generally be defined at the lowest meaningful spatial scale, in other words closest to actual groundwater abstractors and potential polluters. An exception to this preference for local management is where an aquifer system extends across international frontiers, as is the case of the Buna-Bojana Aquifer shared by Albania and Montenegro. Here, transboundary cooperation will be required at the system scale, even if many aspects of routine management could be handled at a local level in groundwater sub-catchments²¹.

Five Coastal Aquifer Management Plans will be established, one for each of the priority aquifers.

Activity 2.4.1: Identify the characteristics of the system which will determine how it can best be managed.

Based on the results of Outputs 2.1 - 2.3, the overall state of groundwater development and the hydrogeological characteristics of the aquifer system will need to be taken into account in developing groundwater management plans. Of highest importance are:

- the geographical scale of the aquifer system and size of its storage reserve, which will determine how identifiable it will be for local stakeholders and how amenable it will be to self-regulation;
- the degree of connectivity with surface water, which will indicate whether conjunctive management
 of surface and groundwater is essential to achieve the efficient use and improved conservation of both
 resources;
- the level of contemporary recharge, since if the use of non-renewable groundwater resources is likely to be involved - it should be subject to rigorous control given the strategic implications for intergenerational equity; and
- aquifer susceptibility to irreversible degradation and groundwater vulnerability to pollution, which
 together will determine the urgency for action and the degree and nature of regeneration that will be
 needed.

This synthesis work will be done and owned by the responsible local agencies and stakeholders under the guidance and with the facilitation of the project expert staff and following the protocols provided by national responsible entities and in conformity with the recommendations emerging from the Groundwater Governance GEF project.

Activity 2.4.2: Protecting groundwater quality

²¹ Transboundary cooperation between Albania and Montenegro on water resources management is already foreseen in the implementation of <u>the Integrated Resources Management Plan for the Buna-Bojana area</u>, developed under the MedPartnership. The Coastal Aquifer Management Plan for the Buna-Bojana coastal aquifer to be developed under

Output 2.5 of Child Project 2.1 will be prepared in line with this wider management plan.

Protecting groundwater quality is one of the ultimate goals of a management plan. The previously described activity should identify key features in the aquifer system to be taken into account when preparing the management plan. This activity will go a step further, integrating the assessment results with existing land use maps and the distribution of economic activities throughout the aquifer area. This multi-dimensional analysis should result in a set of recommendations towards informed management of groundwater resources. The recommendations will be represented in a land use capability map or matrix in relation to groundwater pollution vulnerability to the existing and planned land uses. An example of this is the pilot demonstration in the Ghar El Melh lagoon (Tunisia) (MedPartnership, 2015).

Activity 2.4.3: Reaching consensus on aquifer services

A consultative, participatory process is required to reach consensus on which aquifer services should be prioritized. The priority services could include:

- water supply security for urban, agricultural or other purposes
- guaranteed access for small private users
- sustaining dependent ecosystems and dry weather river flows

A consultative participatory process will be employed to facilitate dialogues, but in the end a decision will have to be taken by the public agency mandated to manage groundwater. During the consultations, particular attention will be devoted to informing stakeholders about the (i) current state of the groundwater resources including quality concerns and any related trends; (ii) the potential consequences and costs of 'no management action'; and (iii) the options regarding management measures.

Activity 2.4.4: Preparation of the Coastal Aquifer Management Plans

The following steps will be to elaborate the Coastal Aquifer Management Plans. Plans will be specific to each priority aquifer system identified, and will incorporate the elements of institutional soundness, incentives and investment. The Plans will be designed in collaboration with all stakeholders and will place the emphasis on adopting an inclusive approach including industrial and agricultural actors.

The following are typical elements of groundwater management plans:

- a technically and economically sound array of demand-side and supply-side management measures to achieve re-balancing of groundwater withdrawals with average recharge, such that the risk of irreversible damage to aquifers such as seawater intrusion and ecosystems is avoided
- prioritization of water uses on the basis of social and economic priorities
- definition of stakeholder roles and institutions and specification of how those roles will be factored in to planning and management, and how stakeholder institutions will be supported
- planning for conjunctive management measures resulting from Output 2.2
- pollution abatement or control measures in the aquifer recharge zone such that the risk of groundwater quality deterioration is managed
- regulatory measures, economic incentives and policy changes to address groundwater management needs within the given legal and institutional framework here the priority will be to achieve a practical balance between top-down administration and bottom-up stakeholder engagement participation, including that of industrial/agricultural and other relevant stakeholders;
- working on the essential linkages to other sectors, be they land use planning, energy provision, trade or other policies.

The Plans will include an operational time-frame and management monitoring framework endorsed by the responsible national/local groundwater agencies and all relevant stakeholders.

The Plans must be dynamic in nature, providing capacity for adaptation to changes in groundwater knowledge and in external drivers (such as climate and land use). The indicators of groundwater status defined as part of Output 2.1 will act as barometers of aquifer condition and facilitate an adaptive management approach, taking into account the appropriate response timeframe for the aquifer. For some types of aquifer systems, the response to external pressures is relatively rapid and can be expected to be manifest in a relatively short period (five years, for example), whereas thick aquifers are slower to show signs of improvement, especially when quality is the issue.

Activity 2.4.5: Coastal Aquifer Management Plan submission for approval and adoption by relevant national authorities

Mobilizing high-level political support is imperative for improving groundwater governance. During the preparation of the Coastal Aquifer Management Plan and the Coastal Aquifer Assessment, relevant regional and national authorities and responsible bodies will be fully involved. Such involvement should facilitate adoption of the Plan by the corresponding authority. The commitment of the responsible authorities and key stakeholders to be involved throughout the process will be documented in a "Foundation Statement" issued at the inception of the planning process.

Once the Plan is completed and reviewed by all involved parties, it will be submitted for formal adoption by relevant authorities²².

Activity 2.4.6: Aquifer monitoring multi-purpose networks and protocols designed and field tested, and responsible personnel trained, in the five priority aquifers.

Successful management needs to be based on sufficient and reliable data regarding the state of the aquifer and its groundwater resources, and its evolution in time. Monitoring programs aim to provide the information required to facilitate informed decisions. The Groundwater Governance Project (GEF FAO 2016) identified the need for data acquisition, information and knowledge generation and information sharing, as one of the basic for governance at global scale. The MedPartnership has evidenced the excessively scarce information regarding coastal aquifers and the almost total lack of dedicated monitoring networks and data. Under this Output, the project intends to address this critical situation that may jeopardize this key freshwater resource, by filling this gap for the five priority coastal aquifers indicated by the countries, and thus set examples and standards for replication across the region.

The design of the monitoring networks and related protocols will be undertaken by national appointed institutions and actors with the guidance and support of the project experts. In order to ensure long-term sustainability of the monitoring program and network, the monitoring program design and implementation will follow, whenever possible, the principle of public consultation and stakeholder engagement.

A groundwater monitoring program is the combination of monitoring stations, monitoring devices, technical expertise, protocols, data management, visualization tools, stakeholders, ruling bodies and action mechanisms, which allow relevant groundwater data to be collected, stored, interpreted and integrated into useful information for groundwater managers to take informed decisions within the context of the Coastal Aquifer Management Plan. All the elements should be designed in such a way to ensure the long-term sustainability of the monitoring program and its response to the evolving necessities of the Coastal Aquifer Management Plan.

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²² Following adoption, the Coastal Aquifer Management Plan may be integrated (as appropriate) in existing natural resources management plans, for example in the case of the Buna-Bojana Coastal Aquifer, which is within the scope of the Integrated Resources Management Plan for the Buna-Bojana Area.

The purposes of each of the five monitoring networks – in line with the EU WFD - will be to provide information on:

- Overall groundwater trends (quality and quantity) in response to climatic fluctuations and water extractions;
- Parts of aquifers subject to over-exploitation;
- Water quality conditions and trends;
- Health of water-dependent ecosystems and humid areas;
- Groundwater-related hazards: pollution, salinization, lowering of the water table; and
- Interactions with surface waters and with the sea.

Each network will consist of two sub-networks:

- The "background sub-network", devoted to the long-term monitoring of selected wells that will provide data from parts of the aquifers with no (or minimal) anthropogenic effects. These are from areas that have been minimally affected by human activities and are expected to remain so. [5]
- The "vulnerable areas sub-network", monitoring more densely populated areas that will provide data on aquifers and groundwater dependent ecosystems that have documented, or are suspected of having, anthropogenic effects. The aquifers may have experienced substantial recharge-altering land use changes; or be known to have degraded water quality or declining water levels.

The designed monitoring network will include the revamping of selected existing stations, if any, and the installation of new automatic data collection and transmission systems at key points in the permanent network.

Activity 2.4.7: GIS-Based Information Management System

An Information Management System (IMS) is a tool to facilitate storage, organization and retrieval of information. It will be one of the key aquifer management tools. This harmonized database will enable appointed experts to collect, store and share data and information in a consistent way, following monitoring protocols developed in conjunction with national institutions.

The IMS will consolidate all aquifer information. This not only includes data coming from field monitoring activities (e.g. field monitoring stations, sampling campaigns), but also all the results from the assessment activities (e.g. vulnerability maps, geological maps) and additional data coming from other databases that will be useful for monitoring of groundwater status (e.g. meteorological data, socioeconomic data). The IMS will then not only be useful to store information and make it available, but it will also allow for quality controls and to easily update existing information. The IMS will be composed by two main elements: the database that should store and organize different types of data, and the GIS viewer that will facilitate access and sharing of the information.

Automatic monitoring of groundwater levels, temperature, electric conductivity, will provide a real-time source of information if autonomous telematics stations are used. All these data will feed automatically in a database, used as a repository from which other applications will draw information. The combination of this automatically updated database and a GIS-based platform is an essential tool that will allow real-time decision making. Both should allow management bodies and expert groups to have access to real-time information, query data in time and space, and visualize information in table and map views.

Finally, courses should be designed to train local experts on the use of the system, how to maintain it and expand it, ensuring local ownership and long-term sustainability of the IMS beyond the project duration.

For this activity, the following tasks will be undertaken:

- Preparation of information sharing protocols (Harmonization between aquifers, agreement on information dissemination);
- Definition of data formats and harmonized nomenclature between countries;
- Construction of Online GIS-based IMS; and
- Preparation and delivery of training on database management and GIS techniques.

Activity 2.4.8: Implementation Pilot Tests

The monitoring network will be tested in all the five priority aquifers. This will imply: (i) the acquisition and setting up of a limited number of pilot monitoring stations and the execution of sampling campaigns (if necessary); (ii) the processing of the raw data; and (iii) their inclusion in the IMS data base and visualization through the GIS-based online system. Additionally, connection of the IMS with any complementary database that offers information useful for the evaluation of management actions. Furthermore, data will be analyzed through the set of agreed indicators. Finally, a report of the pilot performance of the monitoring program design will be delivered.

The pilot testing of the monitoring program will involve capacity building of assigned local experts of stakeholders involved in the monitoring. This will include, between others, training into monitoring techniques, data processing and assimilation, interpretation and reporting.

For this activity, the following tasks will be undertaken:

- 1. Purchase material:
- 2. Preparation and delivery of training on monitoring technology, protocols, maintenance, sampling protocols and reporting;
- 3. Awareness raising, stakeholder's involvement and public participation programs and events; and
- 4. Monitoring test period and performance reporting.

Output 2.5

<u>Facilitation of broader adoption of approaches promoted by the project with attention on long term</u> sustainability and engagement of private sector, national and local water associations and water users.

The major effort of the Component 2 is concentrated in two primary areas: coastal groundwater governance, with the preparation for adoption of Management Plans for five Priority Coastal Aquifers, and the inventory of Submarine Groundwater Discharges (SGD) region-wide. Activities under this output will strive to raise national, regional and global awareness and broadly disseminate the knowledge, expertise and tools gained through the Component's actions, and to promote their replication.

Activity 2.5.1: Promoting coastal groundwater governance

The Management Plans for the five priority coastal aquifers will apply the principles, methodologies and criteria developed under the Groundwater Governance GEF/FAO project. These Management Plans will build on a foundation of knowledge of the scientific and socio-economic characteristics of each priority aquifer obtained through an indicators-based assessment of the aquifers and of their areas of influence, including dependent ecosystems, executed following the methodology developed by the GEF/UN Environment TWAP project. This is a major undertaking never attempted before. The broad dissemination of the results achieved and of the methodologies and criteria utilized will be critical to facilitate the broader adoption, in all the Mediterranean littoral countries and beyond, of the sound coastal

aquifer management frameworks indispensable to preserve these precious freshwater resources for future generations.

The dissemination activities will be developed for audiences at three levels:

- 1. National level: Publication in the national languages of the main documents produced (Management Plan, Aquifer Assessment and others); organization of dissemination events involving stakeholders and the national scientific community;
- 2. Regional level: Proactive participation to the activities and stocktaking events organized in the framework of the CP 4.1, dealing with knowledge management across all MedProgramme Child Projects; and
- 3. Global level: Participation in IW LEARN activities and events, including International Waters Conferences; scientific papers presented and published in major journals /conferences.

Activity 2.5.2: Fostering knowledge on Mediterranean submarine groundwater discharges.

When addressing coastal aquifers management, it is necessary to consider their connection to coastal marine ecosystems through submarine groundwater discharges (SGD). Little is known about them in the region and worldwide, but scientific interest on this so far neglected element of the "source to sea" environmental continuum is growing, also in view of its implications in terms of pollution loads discharged to the sea, of marine ecosystems integrity, and even as additional freshwater resources. This Component of Child Project 2.1 will, for the first time as part of a Large Marine Ecosystem protection initiative, attempt an inventory of SGDs in all project countries applying modern technologies to locate them and assess their flows and possible pollution loads. The results obtained will be made available to all, in the region and beyond, through the organization of a Mediterranean Conference on SGDs, under the sponsorship of IW:LEARN.

Summar of acti ities for Com onents 1 and 2 in each artici atin countr

Each of the participating countries of Child Project 2.1 will benefit from a blend of regional and/or national activities foreseen under Components 1 and 2 of the project. The following pages in Box 2 provide a summary of the activities foreseen in each of the nine participating countries.

ox 2 MedPro ramme Child Project 2.1 S no sis of Acti ities in Project Countries AL ANIA

	THE ANIA	
National acti ities		
Coastal one	National assessment to support implementation of the ICZM Protocol	
Mana ement	 Coast Day central celebration dedicated to coastal aquifers 	
Mana ement of	Preparation of the Priority Actions Plan for the Buna-Bojana Transboundary Coastal	
Coastal Aquifers and	Aquifer	
Related Ecos stems	 National Assessment of Submarine Groundwater Discharges 	
Re ional acti ities		
Coastal one	Participation in the sub-regional training in support of ICZM Protocol implementation	
 Mana ement Identification of gaps regarding coastal observation, to feed into a regional conformed framework for coastal observation to monitor progress towards achievement of environmental status of the coast 		
	 Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis 	
	Participation in annual Coast Day events	
Mana ement of	Joint regional training modules on conjunctive surface and groundwater management	
Coastal Aquifers and		
Related Ecos stems		
Pro ram ide	Sharing of best practices as contribution to MedProgramme-wide Knowledge	

communication and		Management Strategy
no led e	•	Contribution of data and active use of the MedProgramme Knowledge Management
mana ement		Platform
	•	Participation in IW:LEARN events

ALGERIA

	ALGERIA
National activities	
Coastal Zone Management	 National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol Coast Day central celebration
Management of Coastal Aquifers and Related Ecosystems Regional activities	National Assessment of Submarine Groundwater Discharges
	Political de la contraction de Company de la contraction de la con
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

OSNIA AND ER EGOVINA

	OSIMA AND ER EGOVINA
National activities	
Coastal Zone Management	National consultation to support the launch of an Inter-Ministerial Committee
Management of Coastal Aquifers and Related Ecosystems Regional activities	National Assessment of Submarine Groundwater Discharges
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

EG PT

National activities		
Coastal Zone Management	 Preparation of Egypt's National ICZM Strategy, applying the Climagine participatory approach National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol 	
Management of Coastal Aquifers and Related Ecosystems	 Preparation of the Management Plan for the North West Coast Aquifer National Assessment of Submarine Groundwater Discharges 	
Regional activities		
Coastal Zone Management	Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events	
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management	
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events 	

LE ANON

National activities		
Coastal Zone Management	 Preparation of Lebanon's National ICZM Strategy, applying the Climagine participatory approach 	
Management	Preparation of the Integrated Management Plan for the Damour Region, applying the Integrative Methodological Framework developed under the MedPartnership, and the Climagine participatory approach National assessment to support implementation of the ICZM Protocol Stakeholder consultation to support implementation of the ICZM Protocol	
	National consultation to support the launch of an Inter-Ministerial Committee	
Management of	Preparation of the Management Plan for the Damour Coastal Aquifer	
Coastal Aquifers and	 National Assessment of Submarine Groundwater Discharges 	
Related Ecosystems		
Regional activities		
Coastal Zone	Participation in the sub-regional training in support of ICZM Protocol implementation	
Management	 Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast 	
	 Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis 	
	Participation in annual Coast Day events	
Management of	Joint regional training modules on conjunctive surface and groundwater management	
Coastal Aquifers and		

Related Ecosystems			
Program-wide	• Sharing of best practices as contribution to MedProgramme-wide Knowledge		
communication and	Management Strategy		
knowledge	Contribution of data and active use of the MedProgramme Knowledge Management		
management Platform			
management	Participation in IW:LEARN events		

STATE OF LI A

National activities	
Coastal Zone	None
Management	
Management of	 National Assessment of Submarine Groundwater Discharges
Coastal Aquifers and	
Related Ecosystems	
Regional activities	
Coastal Zone	 Participation in the sub-regional training in support of ICZM Protocol implementation
Management	 Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast
	 Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis
	Participation in annual Coast Day events
Management of	 Joint regional training modules on conjunctive surface and groundwater management
Coastal Aquifers and	
Related Ecosystems	
Program-wide	Sharing of best practices as contribution to MedProgramme-wide Knowledge
communication and	Management Strategy
knowledge	• Contribution of data and active use of the MedProgramme Knowledge Management
management	Platform
	Participation in IW LEARN events

MONTENEGRO

National activities		
Coastal Zone Management	Preparation of an ICZM Plan for the Boka Kotorska Bay area (Boka Bay) (applying the Climagine participatory approach) in synergy with the SCCF Project activity, which will mainstream climate change adaptation into this plan	
Management of Coastal Aquifers and Related Ecosystems	 Preparation of the Priority Actions Plan for the Buna - Bojana Transboundary Coastal Aquifer National Assessment of Submarine Groundwater Discharges 	
Regional activities		
Coastal Zone Management	Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events	
Management of Coastal Aquifers and	Joint regional training modules on conjunctive surface and groundwater management	
Related Ecosystems		
Program-wide communication and knowledge	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform 	

Morocco

National activities		
Coastal Zone Management	 Preparation of an ICZM Plan for the Tanger-Tétouan-Al Hoceima Region (applying the Climagine participatory approach) in synergy with the SCCF Project activity, which will mainstream climate change adaptation into this plan National assessment to support implementation of the ICZM Protocol Stakeholder consultation to support implementation of the ICZM Protocol Coast Day central celebration dedicated to coastal resilience 	
Management of Coastal Aquifers and Related Ecosystems	 Preparation of the Management Plan for the Ras Jebel Coastal Aquifer National Assessment of Submarine Groundwater Discharges 	
Regional activities		
Coastal Zone Management	Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events	
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management	
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events 	

TUNISIA

National activities		
Coastal Zone	 National assessment to support ratification of the ICZM Protocol 	
Management	Stakeholder consultation to support ratification of the ICZM Protocol	
	 National consultation to support the launch of an Inter-Ministerial Committee 	
Management of	 Preparation of the Management Plan for the Rhiss-Nekkor Coastal Aquifer 	
Coastal Aquifers and	 National Assessment of Submarine Groundwater Discharges 	
Related Ecosystems		
Regional activities		
Coastal Zone	Participation in the sub-regional training in support of ICZM Protocol implementation	
Management	 Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis 	
	Participation in annual Coast Day events	
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management	
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events 	

) INCREMENTAL COST REASONING E PECTED CONTRI UTIONS FROM T E ASELINE AND CO FINANCING AND GLO AL ENVIRONMENTAL ENEFITS

The GEF funding will work in synergy with and complement Government baseline programs – as delineated in SAP-MED, SAP-BIO and the NAPs – and programs funded by other sources and described in the section 2b) of the Baseline Scenario. Its incremental role will be developed along four main lines of action:

- 1. Supporting the implementation of NAPs (baseline contribution of Governments) and of other complementary actions (other co-financing) within a coherent regional framework characterized by the systematic application throughout the region of the ICZM principles enshrined in the Barcelona Convention Protocol;
- 2. Adding focus on the integration within the ICZM context of critical freshwater resources (groundwater) so far neglected and threatened by irreversible loss due to climate variability and human actions such as over-extraction and land use practices not respectful of the high vulnerability to contamination of coastal groundwater;
- 3. Aiming at the achievement of sustainable environmental stress reduction and improved climate resilience through strategic inter-sectoral coordination and innovation, such as conjunctive surface and groundwater management; and
- 4. Promoting the broader adoption of fully integrated coastal zone and water resources management policies and practices.

National initiatives, strategies and projects have been thoroughly discussed with the GEF Operational Focal Points to ensure that these processes were recently finalized, or under execution, or they will be executed over the lifespan of the MedProgramme. In all cases, the outputs and outcomes of these processes will be contributing to and reinforcing the environmental benefits generated by Child project 2.1, and more in general the objectives of the whole MedProgramme. Specifically:

Algeria will contribute with USD 4,551,270 in-kind co-financing to support the sustainable management of the coastal zones by the definition and reinforcement of climate change adaptation strategies and by protecting protect coastal habitat. These objectives are pursued by Algeria by financing national processes as well as local initiatives in several areas, namely: 1) update of the National Strategy for Integrated Coastal Zone Management; 2) the preparation of studies and analysis for local coastal plans; 3) the assessment of coastal vulnerability; 4) preparation of climate change adaptation plans; and 4) studies for protection and management of coastal areas.

<u>Egypt</u> will contribute with USD 4,064,000 in-kind co-financing to establish national Integrated Coastal Zone Management Strategy and a multipurpose monitoring network of groundwater, seawater and climate parameters, as well as supporting the engagement of all relevant stakeholders for these processes.

<u>Lebanon</u> will contribute with USD 57,723,600 co-financing to support the: 1) construction of waste water networks and waste water treatment plans all along the coast of Lebanon; the dumpsite rehabilitation on the coast of the city of Saida; and 3) the Environmental Resources Monitoring in Lebanon. All these initiatives will directly contribute to the sustainable management of the coastal areas of Lebanon, amplifying the environment benefits produce by Child Project 2.1.

<u>Libya</u> will contribute with USD 600,000 in-kind co-financing to support the protection of coastal habitats. The support will materialize through the financing of national and local initiatives aiming to: 1) updating the National Strategy for Integrated Coastal Zone Management; 2) preparing studies and analysis for local coastal plans; 3) assessing the coastal vulnerability; 4) preparing climate change adaptation plans and studies for protection and management of coastal areas.

Montenegro will contribute with USD 6,100,000 in-kind co-financing to directly support Integrated Resources Management Plan for Buna/Bojana area, including activities related to the treatment and disposal of wastewater, infrastructural work on the regulation of the Bojana River and projects that are supporting the implementation of the EU Water Framework Directive in the country.

orocco is currently supporting to reduce pollution and to promote sustainable development in coastal eras. These initiatives include: The National Program of Liquid Sanitation, the National Household Waste Program, the Master Plan to Promote the Maritime Public Domain, the preparation of National Coastal Plans and the Monitoring Program for Bathing Waters.

<u>Tunisia</u> will contribute with USD 38,622,000 to support a comprehensive set of actions to enhance the management of the Ras Jebel coastal aquifer and its related ecosystems and to support national assessment and stakeholder consultation to support the ratification of the Barcelona Convention protocol for Integrated Coastal Zone Management.

The total co-financing committed by the project's countries (i.e. USD 143,270,231) will be monitored by the MedPCU and execution partners as well as discussed and analyzed at the inception meeting and following annual project Steering Committees.

The GEF funding will be variously distributed in all GEF eligible countries of the Mediterranean Basin in an effort to reconcile regional TDA priorities with national priorities and adhere to the MedProgramme's stress reduction and environmental security imperatives. Experiences gained in one country will be systematically shared regionally, so that all countries will benefit in terms of capacity to adopt and replicate good practices. Increased knowledge and scientific advances (e.g., submarine groundwater discharges) will be common patrimony of all Mediterranean countries and stakeholders and leverage both further research and practical applications.

The Global Environmental Benefits to be gained through the project, in line with the MedProgramme's overall global objectives, are:

- Improved integrity and sustainability of a globally significant transboundary large marine ecosystem the Mediterranean Sea and of the coastal ecosystem goods and services that it provides to society;
- Strengthened multi-country frameworks and transboundary cooperation;
- Increased resilience to the adverse impacts of climate change in vulnerable developing countries.

) INNOVATION SUSTAINA ILIT AND POTENTIAL FOR SCALING UP

Inno ation

The project presents a number of innovations directly derived from the strong emphasis of the MedProgramme on integrated land and water approaches, and from the evolution of the coastal areas discourse now focusing more and more on expanding the concept of ICZM to include consideration of freshwater resources and dependent ecosystems, managing conflicts at the water nexus, establishing sound groundwater governance frameworks, introducing conjunctive surface and groundwater management solutions.

Based on the experience from the implementation of the MedPartnership project, efforts towards converging management approaches have been designed in the two components of the project, and particularly in the implementation of the Integrative Management Framework for coastal zone land and water resources developed under MedPartnership. The project includes a number of other actions and approaches which are novel for the region, and in some cases even globally:

- Interventions that will focus on specific hot spots sites or critical coastal sections, selected with the countries for their expected high stress reduction and replication potential.
- The preparation of "Coastal Aquifer Management Plans" following the final recommendations of the recently concluded GEF Groundwater Governance Project and based on the TWAP Level 2 assessment methodology, which will be implemented for the first time globally.
- The translation of vulnerability to human actions and climatic events of coastal water resources and ecosystems into "Coastal Zone Land and Water Use Capability Units" and/or "vulnerability and suitability maps".
- The inventory and assessment of submarine discharges of groundwater, something of high scientific and practical interests never attempted before and never considered as part of a marine environmental management initiative.

- Introduction of gender equality consideration not just in project execution modalities, but also and primarily as an integral part of coastal zone management and planning processes.
- Institutional sustainability promoted by consolidating national policy, planning and regulatory frameworks that
 support of sustainable coastal zone management and the provision and maintenance of coastal ecosystem services.
 The context of regional agreements, binding instruments and long-standing multi country cooperation established
 through the Barcelona Convention and its Protocols and previous GEF funded initiatives will foster sustainability
 and scaling up.
- Harmonized aquifer and coastal zone monitoring protocols and indicators, linked with interconnected databases, that will also improve management capacity and sustainability at both national and regional levels.

Sustaina ilit

The sustainable provision of goods and services from coastal ecosystems is the overarching objective of the project. Ensuring the sustainability in time of the processes and outcomes that are expected to lead to the achievement of this objective was a special consideration during the entire project formulation process, as captured in the following points:

- The project is embedded within the MedProgramme and supportive of the implementation of the widely politically endorsed SAP-MED and related NAPs and of the ICZM Protocol to the Barcelona Convention.
- Project outcomes, outputs and activities are reflective of the needs and priorities, and existing plans and commitments of the project countries and associated regional and sub-regional governance bodies and development partners.
- For the coordination and execution of its actions, the project will build as much as possible upon those elements of the regional governance framework that are already solid and in place. To make this happen, major project coexecuting arrangements will be made with those UN Agencies, Regional Activity Centres of the MAP system and NGOs that are well-established and have a formal long-term mandate that is key to the sustainable management in the region.
- The project will further embed as much as possible its activities within the context of ongoing native governance processes and target the delivery of project outputs and outcomes in alignment with key regional decision-making processes active during the project implementation period.
- By these means, and through the efforts of key project partners to further fully involve their constituencies, regional and national-level ownership over the project will be maximized.
- Taken together, the previous points will contribute to ensuring the continuity of efforts initiated, and the sustainability of outcomes achieved under the project, well beyond the project's own lifespan.

As highlighted in several sections of the project, the strategic engagement of private sector as well as the capacity building of national and local water associations and water users is a crucial element for long terms sustainability of the environmental benefits produced by the project. In this sense, particular attention will be put on engaging private sector, water associations etc. in targeted meeting, training and workshop. This will be particularly important for activities related to the ICZM and for activity 2.2.1 on national level stakeholder analysis for management of coastal aquifers, activity 2.2.3 on national dialogues identifying potential conjunctive management solutions, and activity 2.4.3 aiming to reach consensus on aquifer services. The entry point to reach and engage these stakeholders will be the ongoing national governance processes which already include representatives of these actors as illustrated in baseline section of this document.

Finally, please consider ways in which these points can be reflected clearly across relevant project outputs. In addition to the above, please add language in the project document speaking to the need to pay special attention to the above stakeholders as the targeted stakeholders' involvement plan is developed at project inception.

Sta eholder u in

Active involvement of the wider set of stakeholders in project implementation is considered important to achieve buy-in for project processes and outputs, and is thus an essential factor of overall project success. Project partners will therefore promote and engage in the use of inclusive and participatory approaches. Special attention will be given to the involvement of women, indigenous groups and communities that are highly dependent for food and income on the coastal environment.

Re lication and u scalin of results

It is recognized that a major up-scaling of the project efforts in the region will be essential to achieve the overall longer-term objectives of the SAP-MED and the NAPs. The proposed 5-year project specifically aims at jumpstarting the implementation of the broader long-term action program.

Besides jumpstarting SAP implementation, through its two distinct Components the project has also been specifically designed to encourage and facilitate uptake of lessons learnt, and replication and up-scaling of best practices, within the Mediterranean region and beyond. Since the project is nested in the MedProgramme, it will benefit from the supporting platform provided by Child Project 4.1 specifically designed for such future replication/up-scaling within the region, for enhancing the human and institutional capacity, and fostering better coordination and collaboration among stakeholders, GEF focal areas and different donor initiatives.

A.2. C ILD PRO ECT IF THIS IS A CHILD PROJECT UNDER A PROGRAM, DESCRIBE HOW THE COMPONENTS CONTRIBUTE TO THE OVERALL PROGRAM IMPACT.

The presumption underlying the MedProgramme design is that overall environmental security, the sustainability of the livelihoods of growing coastal populations and their resilience to the adverse impacts of climate change and variability will be improved by addressing (1) hot spots of coastal/marine pollution and habitat degradation, (2) implementing ICZM and nexus planning, introducing conjunctive surface and groundwater management, protecting coastal groundwater-related ecosystems and (3) conserving coastal/marine biodiversity. The MedProgramme's Theory of Change in fact builds on the notion that if hazardous chemical pollution and wastes production hotspots are eliminated and sustainable production and consumption practices adopted systematically; if the freshwater resource base of coastal zones is protected and increased through the reuse of treated wastewaters; if priority coastal aquifers are sustainably managed and/or protected from seawater intrusion (e.g., by artificial recharge schemes); if land uses in priority coastal zones are regulated respecting their intrinsic vulnerabilities and natural characteristics including coastal environmental and geological processes, and fostering gender equality; if the sustainability of the achievements so far in biodiversity conservation is strengthened; if transboundary cooperation will ensure harmonization of policies and of monitoring procedures, then the coastal populations along the southern and eastern Mediterranean shores will benefit from improved health conditions, more stable livelihoods, gender equality and enhanced resilience to climatic change and variability.

The Child Project 2.1 will play a crucial role in achieving the desired impacts of the MedProgramme underlined above. It will do so by assisting countries, coastal zone managers and populations to protect and use sustainably the available coastal freshwater supply threatened by evolving climatic conditions, pollution, and competition at the water nexus, and to adopt coastal zone management and land use policies respectful of the intrinsic vulnerabilities, carrying capacity, and cultural, social and economic functions of the Mediterranean coasts and ecosystems. Consistently with the design of the MedProgramme, Child Project 2.1 will operate in synergy with all the other Child Projects under Components 1 and 2 addressing the reduction of pollution from nutrients and persistent toxic substances in coastal hotspots of (Child Projects 1.1, 1.2, 1.3), the reuse of treated wastewaters (Child Project 1.2), and the resolution of conflicts at the water nexus (Child Project 2.2). The synergistic interactions among these projects will trigger catalytic impacts that will be enhanced and disseminated throughout the region by the MedProgramme-wide knowledge management and coordination project 4.1. Last but not least, Child Project 2.1 will by design bring together various executing partners playing important roles and actively engaged in the region, but so far acting primarily in a fragmented and sectorial way – PAP/RAC, UNESCO IHP, GWP Med and Plan Bleu. Their interaction may prove very effective in producing long lasting beneficial impacts in coastal zone management approaches in the Mediterranean region, better integration of hydrological, geological and environmental sciences with land use and water resources planning; education with capacity reinforcement; monitoring with policy making.

The project will also foster compliance with a number of regional and global agreements, and support country efforts to achieve numerous targets of the Sustainable Development Goals, with focus on Goals 6, 13 and 15. The following Table 5 summarizes the project's contributions to the Agenda 2030 process.

Sustaina le De elo ment Goals	Contri utions of
	Child Project 2.1
1. End Poverty in all its forms everywhere	Targets 5, 1. a
5. Achieve gender equality and empower all women and girls	Target 5
6. Ensure availability and sustainable management of water and sanitation for all	Targets 1, 2, 3, 4, 5,6, 6.a, 6. b
8. Promote sustained, inclusive and sustainable economic growth, full productive	Targets 4, 9
employment and decent work for all	
12. Ensure sustainable consumption and production patterns	Target 2
13. Take urgent action to combat climate change and its impacts	Targets 1, 2, 3, 13. a
14. Conserve and sustainably use the oceans, seas and marine resources for	Target 2
sustainable development	
15. Protect, restore and promote sustainable use of terrestrial ecosystems,	Targets 1, 3, 5
sustainably manage forests, combat desertification, halt and reverse land	
degradation and halt biodiversity loss	

A STA E OLDERS. IDENTIFY KEY STAKEHOLDERS AND ELABORATE ON HOW THE KEY STAKEHOLDERS	
ENGAGEMENT IS INCORPORATED IN THE PREPARATION AND IMPLEMENTATION OF THE PROJECT. DO THEY IN	CLUDE
CIVIL SOCIETY ORGANIZATIONS (YES \boxtimes /NO \square)? AND INDIGENOUS PEOPLES (YES \square /NO \boxtimes)? ²³	

Successful coastal zone management and planning, including coastal aquifers, is based and fully dependent on the effective participation of all relevant stakeholders.

Stakeholder participation is an inherent part of the structure of MAP and the Barcelona Convention where all countries (represented by the MAP focal point) form the Contracting Parties to the Barcelona Convention. Within each country, MAP and its Regional Activity Centres have designated focal points that are responsible for the co-ordination of specific actions. In addition, about 100 NGOs and Intergovernmental Organizations, termed "partners" are participants to the meetings of the Barcelona Convention. It should also be stressed that stakeholders participated in the formulation of the TDA-MED, SAP-MED, SAP-BIO and countries' NAPs, on which the present project is based. The activities of the project have been developed based on priorities of all participating countries, and all activities have been designed to involve all key stakeholders on a number of levels, from implementation, knowledge transfer, dissemination and replication. In summary, the key stakeholders (Table 6) on a national level include:

- Public Sector: ministries/entities responsible for water resources; environment; spatial and development planning; transport; tourism; fisheries; industry; maritime affairs; health; community development; education; culture; local government authorities.
- Private Sector: national and regional organizations representing: farmers; fisherfolk; manufacturers/industrialists; tourism and aquaculture sector; banks; insurance sector.
- Non-governmental Organizations (NGOs): national trusts; conservation associations; women's organizations; community-based organizations (CBOs);
- Scientific community: researchers; sociologists; environmental managers; engineers (water, civil, environmental); environmental economists; biologists; climatologists, geographers, oceanographers; teachers; curriculum specialists; media practitioners.

The following (Table 7) is a general list of national stakeholders, including mostly governmental bodies, civil society organizations, and academia, which was agreed upon with the countries. At the project inception, a more strategic and

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²³ As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

targeted stakeholders' involvement plan will be presented, which will inform the design of stakeholder participation activities needed for the production of each project output.

During the project development phase, several additional relevant stakeholders were identified in the Mediterranean region. These stakeholders will not have a direct role in the project execution. Nevertheless, they will be involved in meetings, trainings and outreach activities by the executing partners of the Child Project 2.1. The complete list of national stakeholders for the project is provided in Annex P.

Special attention will be pay to the involvement of relevant private sector and water/coastal associations and users during the project's inception phase, specifically during the elaboration of the project's stakeholders involvement strategy.

Ta le 6 Typologies of stakeholders for Child Project 2.1

T e	Exam les	General roles res onsi ilities in the roject
National governments	Ministries responsible for: Food Security (Fisheries, Aquaculture, Agriculture, Forestry) Environment/ Sustainable Development Tourism Finance and Planning Foreign Affairs Energy and Mining Meteorological Services; Coast Guards; Statistics;	 Overall: National governments should address transboundary issues In execution of specific roles and responsibilities, national government agencies should develop and implement mechanisms to facilitate participation of stakeholders in the project and related programmes and projects Specific: Develop, enforce, monitor and evaluate policies related to the shared marine/coastal resources (e.g. ministries responsible for environment, fisheries, finance, foreign affairs, tourism) Lead or participate in development and implementation of national and regional programmes, projects and initiatives aimed at reducing habitat degradation, pollution and unsustainable freshwater abstractions. Act as focal points of the project responsible for implementation at the national level Collect, manage, analyze and share information relevant to the governance of the shared coastal/marine space
National and regional private sector companies and associations	Regional and national private sector associations (e.g. Hotel and Tourism Association, national chambers of commerce) Individual large and medium-sized companies (e.g. fishing companies; hotels, restaurants, oil and gas companies; shipping companies, banks, insurance companies) Small and micro enterprises and their associations (e.g. fishers and national fisherfolk organizations; tour operators and associations)	 Overall: Diverse group with varied and often competing interests, roles and responsibilities (e.g. oil companies are key stakeholders in pollution and habitat degradation issues rather than in unsustainable fishing, while water utilities are key stakeholders in addressing all transboundary issues) Specific: Provide and collect data and information on different aspects of the shared coastal/marine space and the factors affecting it Assist in implementation of the policies and application of best practices to ensure that recommended environmental, safety and other standards and regulations are being met Some private sector groups directly involved in decision making on the different transboundary Assist in development of policies, regulations and plans related to the marine environment
National and regional academia and research institutes	Research institutes for groundwater resources, marine biology, climate change science,	 Conduct research and collect, manage, analyze and share information on the transboundary issues and climate change Provide technical analysis and advice to national governments on policy implications of research Assist in technical review and evaluation of policies at the regional and national levels
National and regional media	State-sponsored television or radio outlets Regional news agencies or journalists'	Assist in developing awareness about the value of the coastal/marine ecosystems and the services that they

Те	Exam les	General roles res onsi ilities in the roject
of or ani ation		
	associations	 provide Share information relevant to addressing the transboundary issues in the shared marine space Act as independent 'watchdog' and investigate and communicate key issues to public

Ta le 7 Key stakeholders for the Child Project 2.1

- Areas and Lakes of the Egyptian Environmental Affairs Agency (EEAA)
- National Steering Committee for ICZM
- General Organization for Physical Planning, Ministry of Housing
- Shore Protection Authority (SPA), Ministry of Water Resources and Irrigation
- Coastal Research Institute (CoRI), Water Research Center, Ministry of Water Resources and Irrigation
- National Council for Climate Change
- Coastal Governorates
- UNDP Egypt
- Friends of Environment and Development Association Egypt

Le anon

- Ministry of Environment
- Ministry of Energy and Water
- Ministry of Public Works and Transport
- Directorate General of Urban Planning
- Directorate General of Land and Maritime Transport
- Directorate General of Administrative and Local Councils
- Coastal Brigade Command and the Coastal Detachments
- Ministry of Agriculture
- Order of Engineers and Architects
- Syndicate of Hotel Owners in Lebanon
- Cooperatives of Fishermen

Li a

- Environment General Authority
- General Water Authority
- Ministry of Housing and Utilities
- Ministry of Local Government

Montene ro

- Public Enterprise for Coastal Zone Management
- Directorate for Climate Change and Med. Affairs
- Directorate for Spatial Planning
- National Council for Sustainable Development, CC and ICZM
- Municipality of Kotor
- Municipality of Tivat
- Municipality of Herceg Novi
- Ministry of Transport and Maritime Affairs
- NGO Expeditio
- NGO Green Net
- National Tourism Organization

Morocco

- State Secretariat in charge of Sustainable Development of the Ministry of Energy, Mining and Sustainable Development
- State Secretariat in charge of Water, Ministry of Equipment, Transport, Logistics, and Water

- Ministry of National & Urban Planning, Housing and Urban Policy
- Ministry for Agriculture, Maritime Fisheries, Rural Development, Water and Forests
- National Commission for Integrated Coastal Management
- Regional Council of Tangiers-Tétouan-Al Hoceima
- Port Authority of Tangiers-Med
- ONEM (National Observatory of Environment)
- Foundation Mohamed V for Environment Protection

Tunisia

- Agence de Protection et d'Aménagement du Littoral (APAL)
- Ministry of Environment and Sustainable Development
- Ministry of Equipment, Housing and Territorial Development
- The Tunisian Association of Climate Change and Sustainable Development
- Academic institutions and Research Centers
- Ministry of Local Affairs and Environment
- National Agency for the Protection of the Environment

Outcome 2

Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater-related coastal habitats.

Out ut 2.1

Detailed assessments of the current state of priority coastal aquifers and related coastal ecosystems, vulnerability maps and recommendations for land use planning addressing relevant stakeholders, including private sector, national and local water associations and water users.

Out ut 2.2

National Dialogues identifying potential conjunctive management solutions, including stakeholders' training modules designed and implemented.

Out ut 2.

National Assessments of Submarine Groundwater Discharges and of Marine – Freshwater Interactions.

- UN Environment/MAP (EA)
- UNESCO-IHP (EP)

Al ania

- Ministry of Tourism and Environment
- Agency for the Management of Water Resources
- Water Resources Management Agency (formerly Technical Secretariat of National Water Council)
- Albanian Geological Survey
- Academic institutions and Research Centres

Al eria

- Urban Agency in charge of the Protection and Promotion of the Littoral and tourist areas of the wilaya of Algiers
- National Commissariat of the Littoral
- National Institute of Cartography and Remote Sensing
- National Office of Statistics
- Ministry of Water Resources

osnia and er e o ina

- Federal Geological Survey Bosnia and Herzegovina
- Federal Ministry of Agriculture, Water Management and Forestry
- Federal Ministry of Energy, Mining and Industry
- Federal Institute for Hydrometeorology of

Out ut 2.

Priority aquifers coastal management plans produced including design and field testing of aquifer monitoring multi-purpose networks and protocols.

Out ut 2.

Facilitation of broader adoption of approaches promoted by the project with attention on long term sustainability and engagement of private sector, national and local water associations and water users.

- Bosnia and Herzegovina
- Federal Statistics Institute Statistics Institute
- Ministry of Agriculture, Forestry and Water Management of Republic of Srpska
- Karst Management Centre in Trebinje

\mathbf{E} t

- Coastal Zone Management Department of the Egyptian Environmental Affairs Agency (EEAA)
- Ministry of Water Resources and Irrigation
- Central Department for the Integrated Management of Coastal zones
- Central Laboratory for Environmental Quality Monitoring (CLEQM - UNESCO C2C)

Le anon

- Ministry of Energy and Water
- Academic institutions and Research Centres

Li a

• General Water Authority

Montene ro

- Pu lic enter rise for Coastal one mana ement
- Directorate of ater mana ement
- Geolo ical Sur e of Montene ro

Morocco

- Secrétariat d'État chargé de l'Eau auprès du Ministère de de l'Equipement, du Transport, de la Logistique et de l'Eau (State Secretariat in charge of Water, Ministry of Equipment, Transport, Logistics, and Water)
- State Secretariat in charge of Sustainable Development of the Ministry of Energy, Mining and Sustainable Development
- Regional Consultation Commission for the Littoral
- OREDD (Observatoires régionaux de l'environnement et du développement durable - Regional Observatories for the Environment and Sustainable Development)
- CNESTEN (Centre national de l'énergie, des sciences, et des techniques nucléaires)
- National commission for integrated management of the littoral
- High commission of Water, Forests and Combating Desertification
- Regional Council of Tangiers-Tétouan-Al Hoceima

	Tunisia
	 Public enterprise for Coastal zone management Directorate of Water management Geological Survey of Montenegro Agence de Protection et d'Aménagement du Littoral (APAL) Ministry of Agriculture, Hydraulic Resources and Fisheries Office of Planning and Hydraulic Balance General Directorate of Water Resources Office of Inventory and Hydraulic Research General Directorate of Rural Engineering and Water Use Directorate of Urban Hydraulics National Office of Sanitation

UN Environment and all the MedProgramme partner agencies are committed to supporting capacity development of its national partners to adopt approaches that advance women's rights and take account of the full range of their contributions to development. Involving both women and men in the Programme's activities is likely to increase project effectiveness and efficiency. Participation by both genders also improves project performance and improves the likelihood of sustainability. In other words, a project is more likely to achieve what planners hope it will achieve if women and men (both rich and poor and representing different sectors) are active participants and decision makers. (MedProgramme)

Gender mainstreaming and promoting women's empowerment are strategic and operational imperatives for the GEF. Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in October 2017, shifting the focus from *a gender-aware do no harm* approach to a *gender-responsive do good* approach. Men and women have differentiated access to natural resources and, as a result, they are affected differently by changes to these resources and dependent livelihoods. Gender inequality and social exclusion increase the negative effects of environmental degradation on women and girls. Despite recent promising policy and legal reforms, and the full appreciation in the region that women in decision-making spaces can promote sustainable water resource use and management, persistent gender-discriminatory social and cultural norms, unequal access to land, water and productive assets, and unequal decision-making power continue to constrain women and men from equally participating in, contributing to, and benefitting from environmental projects and programs.

No water management assessment or diagnostic can be realistic without a gender perspective. And no decision-making is inclusive unless both women and men participate in the process. In line with the GEF Gender Equality Action Plan, the project will conduct a gender analysis as part of the ICZM planning process and of the preparation of management plans of priority aquifers, in order to systematically introduce gender responsive results frameworks and foster women's

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²⁴ Same as footnote 8 above.

empowerment. Gender consideration will inform all activities and products of the proposed project, in particular fostering women's participation to all working groups, dialogues, consultations and awareness raising activities. A gender assessment for the project preparation phase of the Child Project 2.1 was conducted, and a gender action plan has been drawn up to reflect gender elements within the larger project framework (see Annex O). These are in line with the MedProgramme's overarching Gender Mainstreaming Strategy (Annex T).

In addition, the project will conduct national training courses to familiarize stakeholders in all project countries on gender analysis and indicators, and on sex disaggregated data collection, in order to assist countries in overcoming one of the key stumbling blocks to achieving a more robust gender-integrated national policy regime: the lack of comparable national data on gender-sensitive water indicators. International as well as national policy mechanisms are driven first and foremost by data. Without sex-disaggregated data, it is not possible to fully measure progress towards Sustainable Development Goals (SDGs). Without sound, scientifically collected data, it is difficult to make effective analytical assessments of the comparative situation of women and men in different communities, countries, or parts of the world. If data are not available on a topic, no informed policy will be formulated; if a topic is not evident in standardized databases, then, in a self-fulfilling cycle, it is assumed to be unimportant. IW:LEARN has promoted the indicator-based methodology for collection and analysis of key sex-disaggregated water data developed by UNESCO World Water Assessment Programme, with the purpose of creating a baseline knowledge related to water, from which gender progress can later be evaluated. Priority gender-sensitive indicators fall under five broad topics:

- 1. Water governance;
- 2. Safe drinking water, sanitation and hygiene;
- 3. Decision-making and knowledge production;
- 4. Transboundary water resources management; and
- 5. Water for income generation for industry and agriculture.

More specifically, the indicators relate to women's empowerment and participation in water decision- making, income generation, and unaccounted-for water-related working hours or 'time poverty'.

A major objective of the project will be the development of supportive ICZM and coastal aquifers policy and frameworks, and of monitoring protocols harmonized across beneficiary countries. These efforts will also be aimed at ensuring that the gender perspective is successfully incorporated into environmental and ICZM policies and activities. It is expected that this objective will be achieved by:

- Identifying gaps in equality and developing strategies and policies to close those gaps;
- Considering gender issues in the mapping and analysis of coastal zone uses;
- Promoting women's participation in awareness raising and training activities, while raising gender awareness and contributing to 'male sensitization' to these issues;
- Supporting educational activities, on topics such as the environment, energy, and decision-making in general;
- Involving women's organizations: while the responsibility for implementing a gender approach does not rest solely with women's organizations, they are natural vehicles for promoting gender equality at the local as well as the national level.

Balanced gender participation in project execution activities will be ensured, including in working groups, the MedProgramme Coordinating Unit, text drafting teams, etc. Gender consideration will be mainstreamed in all documents produced by the project, and particular attention will be paid to gender balance in monitoring and reporting activities. The project will work to ensure a balanced participation among men and women in the overall stakeholder involvement strategy and in consultation workshops and training programmes, and will support both women and men contribution individually, rather than assuming that both groups will benefit equally from gender-neutral development interventions

- 1) did the project conduct a gender analysis during project preparation? YES
- 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators? YES

3) what is the share of women and men direct beneficiaries (women X%, men X%)? NA^{25}

A. RIS. ELABORATE ON INDICATED RISKS, INCLUDING CLIMATE CHANGE, POTENTIAL SOCIAL AND ENVIRONMENTAL RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND, IF POSSIBLE, THE PROPOSED MEASURES THAT ADDRESS THESE RISKS AT THE TIME OF PROJECT IMPLEMENTATION.

The risk are presente in (Table 8)

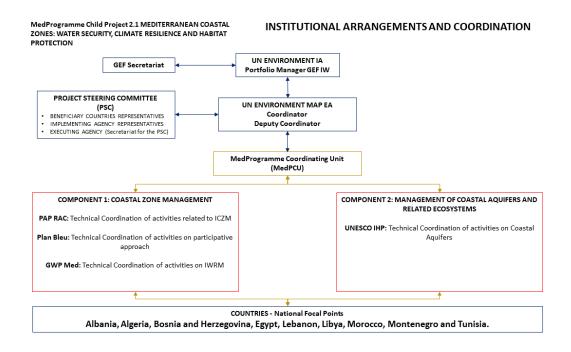
Ta le 8 Risks for Child Project 2.1

Ris	Le el of ris	Miti ation measures
Lack of Political Support	Low	This risk is unlikely to materialize given that Child Project 2.1 design is the result of extended consultations with all beneficiary countries and responds to their stated priorities. The project moreover foresees joint execution teams for all activities, with external experts guiding and facilitating the work of national experts and government officials and representatives, who will be in charge in all major decision points.
Political instability	High	As stated in the MedProgramme Framework Document, "some southern and eastern Mediterranean countries are going through a period of political volatility and social unrest that might negatively affect the Program's full implementation". In view of this, Child Project 2.1 will be implemented only in those countries were conditions are considered stable and/or rapidly improving. It has to be fully appreciated that the deteriorated social conditions and migratory fluxes caused by economic, environmental, or political factors affecting parts of the coastal regions object of the project, call for urgent support from the international community, support of which the project represents a meaningful signal.
Climate Change and Variability	Moderate	Future climatic scenarios indicate the Mediterranean region as one of the most affected by climate change and variability, whose signs are already being felt particularly in the Southern and Eastern Mediterranean. Improving the resilience of coastal populations and ecosystems to climatic impacts – increased frequency, duration and intensity of droughts, sea level rise, increased evaporation – is in fact a key objective of the MedProgramme, and of Child Project 2.1 in particular. It is not expected that climate change will have an impact on the Child Projects execution. Nevertheless, climate change might be contributing to the instability of the region and to the migratory fluxes. Therefore, the project's Steering Committee will have the authority to adopt contingency measures including changes in project activities and sites, to manage the potential adverse effects of unanticipated events.
Scarce coordination and synergies between the two project Components	Low	The project design revolves around only two major components: one, under the responsibility of PAP/RAC, dealing with the implementation of ICZM planning; the other, under the responsibility of UNESCO, dealing with coastal aquifers and groundwater governance. While cooperation and complementarities have been built in a number of project activities in both Components, there might remain some risk of poor communication and overlaps. To avoid this, the execution arrangements of the project establish ad hoc mechanisms for dialogue and joint decision making involving both executing agencies and country representatives.

²⁵ Share of women and men direct beneficiaries will separately defined in project targets during the Inception Phase and duly reported during project implementation.

A.6. INSTITUTIONAL ARRANGEMENT AND COORDINATION. DESCRIBE THE INSTITUTIONAL ARRANGEMENT FOR PROJECT IMPLEMENTATION. ELABORATE ON THE PLANNED COORDINATION WITH OTHER RELEVANT GEF-FINANCED PROJECTS AND OTHER INITIATIVES.

The institutional arrangement and coordination of the Child Project 2.1 is illustrated in Figure 40.



Fi ure Institutional Arrangements and Coordination of Child Project 2.1

Im lementin A enc (IA) The GEF Units in the Ecosystems Division of UN Environment will serve as Implementing Agency (IA) for Child Project 2.1. The IA will be responsible for overall supervision of the project and will oversee its progress through the monitoring and evaluation of activities and through progress reports. The IA will report on the project implementation progress to the GEF and will take part in the Project Steering Committee (PSC). The IA will provide guidance and oversight of project execution by the Executing Agency (EA) including through the review and approval of work plans, budget allocations and budget revisions proposed by the Executing Agency.

Project Steerin Committee (PSC) The PSC will be established and will carry out the function of a Project Board. The PSC will consist of: 1) beneficiary countries, the IA and the Executing Agency (EA) representatives; and 2) the MedProgramme Coordinating Unit (MedPCU) acting as Secretariat for the PSC. These are the Members of the PSC. Countries will be represented at the PSC at a technical, decision making level, e.g. national focal points. Following the model of the PPG MedProgramme Regional Consultation Meetings, the PSC meetings will bring together International Water stakeholders, with parallel technical working sessions combined with plenary discussion and approval of workplans to maximize transparency and joint working across the two Focal Areas.

It is anticipated that to ensure an efficient use of the resources, PSC of different Child Projects of the MedProgramme will be organized back to back. These meetings will dedicate one session to inform the countries about the progress made by the entire MedProgramme followed by several sessions dedicated to specific decisions to be made by the countries for each Child Project.

The Executing Partners (EP) will intervene at the PSC to present the progress made and support the Secretariat for the PSC by providing background information on substantive and technical issues, as well as on modification to the Project Document and its annexes presented to the PSC by the MedPCU. The role of the PSC is to:

Oversee the project;

- Provide overall guidance and ensure coordination among all parties;
- Provide overall supervision for project implementation;
- Approve the annual work plan and budget;
- Oversee the implementation of corrective actions;
- Enhance synergy between the project and other ongoing initiatives related to the GEF International Waters Focal Area:
- Ensure full coordination of the project with the entire MedProgramme.

Additional stakeholder representatives from private sector, academia, CSOs, NGOs, etc. can be invited to join the PSC during the project execution as observers. At all times, the PSC and its activities will comply with the policies, conditions and regulations of the UN and the GEF.

Executin A enc (EA) The UN Environment/Mediterranean Action Plan (UN Environment/MAP) will serve as the Executing Agency (EA) for the project. The EA will report on the project implementation progress to the IA (including those activities executed by the Executing Partners). The EA will organize the PSC and host the MedPCU which will act as Secretariat to the PSC. The EA will be responsible for, inter alia, the following required activities to achieve the project objectives, outputs and outcomes:

- Establishing, hosting and supervising the MedProgramme Coordinating Unit (MedPCU);
- Acting as Secretariat for the Project Steering Committee (PSC);
- Ensuring that the project is executed according to the agreed work plan and budget;
- Review and submit required reporting obligations to the IA, including quarterly expenditure reports and annual Project Implementation report (PIR);
- Ensuring all procurement is done in compliance with Agency standards;
- Communicating with and disseminating information to the Executing Partners (EP) and other stakeholders.

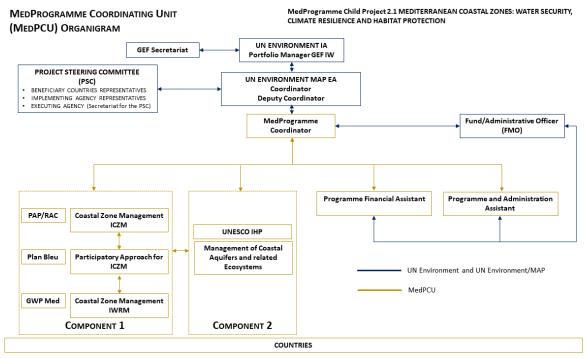
The EA will ensure that all activities, including procurement of goods and services, are carried out in strict compliance with the rules and procedures of UN Environment and GEF. The EA will be responsible for the establishment, adequate staffing and uninterrupted functioning, throughout the project's life span, of the MedProgramme Coordinating Unit MedPCU).

MedPro ramme Coordinatin Unit (MedPCU)

During the project development phase of the Child Projects under the MedProgramme (GEF ID9607), particular attention was given to setting up a MedProgramme Coordinating Unit (MedPCU). The MedPCU was designed taking into consideration the high complexity of the MedProgramme. The staff under the MedPCU will have to deliver a multitude of cross-cutting functions across the Child Projects of the Programme. Moreover particular attention was given to cost efficiency by centralizing the overall Programme management into a single cost-cutting unit, thus avoiding duplication of project management units, functions, task and deliverables. This choice will also ensure timely and consistent execution of the Child projects of the MedProgramme, allowing at the same time transfer of lessons learned and cross-fertilization. It is anticipated that the MedPCU will be staffed with the following core positions:

- MedProgramme Coordinator (P4)
- Programme Officer CW (P3)
- Programme Financial Assistant (G5)
- Programme and Administration Assistant (G5)

In addition to this, the MedPCU operations will be supported during specific periods of the lifespan of the Child Project 2.1, by one Gender Specialist, one Knowledge Management Specialist and by a regional expert on ICZM and IWRM, to be engaged through out-sourced contracts. The proposed organigram for the PCU is:



Fi ure 1 Organigram of the MedProgramme Coordinating Unit

The MedPCU will be established, hosted and supervised by UN Environment/MAP (Barcelona Convention). The MedPCU will ensure coordination across the entire MedProgramme and the consistent execution of the seven Child Projects implemented by UN Environment and executed by MAP (Barcelona Convention), as well as the Child Project implemented by EBRD. In terms of MedProgramme coordination, the MedPCU will provide management functions to the Child Projects implemented by UN Environment and executed by UN Environment/MAP and EBRD.

The Unit will be responsible for, inter alia, the following tasks:

Child Project 2.1 management services:

- Manage the flow of information from the field and produce periodic monitoring reports, namely quarterly financial expenditure reports; annual expenditure forecasts and procurement plans; half-yearly narrative reports of progress including the annual Project Implementation Review;
- Initiate, validate, sign and implement legal instruments with all bilateral partners including executing partners and countries where appropriate;
- Organize travel and payment of DSA for staff and consultants as needed;
- Coordinate and support the project activities of PAP/RAC, Plan Bleu and GWP Med (Component 1), and UNESCO IHP (Component 2);
- Organize the meetings of the Project Steering Committee (PSC) and serve as its Secretariat;
- Ensure the Project governance and oversight of the financial resources from the GEF investment and the co-financing delivered by the Project stakeholders.

Programmatic coordination:

- Ensure that the execution of the entire MedProgramme is aligned and integrated with the priorities of the Contracting Parties to the Barcelona Convention, its 2016-2021 Mid-Term Strategy and biennial Programmes of Work:
- Ensure that the execution of the MedProgramme Gender and Knowledge Management Strategies is consistent across the entire Programme.
- Establish a mechanism to monitor and evaluate progress towards the objectives of the MedProgramme as a whole.

MedProgramme Visibility:

• Represent the MedProgramme in global events and initiatives.

- Ensure that the Programme Annual Stocktaking Meeting is organized in a coordinated manner to efficiently serve the countries, IA, EA and stakeholders;
- Share the Project achievements, products/outputs with the Project and MedProgramme's stakeholders;

<u>Technical support (refer to detailed deliverables in Table 10 below):</u>

- Provide staff time and expertise in guiding and advancing the execution of technical activities under the Project;
- Coordinate with administrative and technical staff on drafting and compiling tender documents as needed; advertise tenders where relevant; convene and/or contribute to tender review committees where appropriate;
- Coordinate with administrative and technical staffs on drafting and compiling tender documents as needed; advertise tenders where relevant; convene and/or contribute to tender review committees where appropriate

The cost of the MedPCU will be covered by PMC, cash co-financing provided by the Barcelona Convention and to a minor extent, by the projects budget as detailed in Table 9. The latter, will be allocated specifically for Child Project 2.1 to run technical and substantive tasks as described in Table 10 below.

Ta le 9 Detailes of the budget allocated for the MedPCU

MedProgramme Coordinating Unit (MedPCU)		Budget Allocated for the MedPCU US\$		Total US\$
	GEF Grants	PMC ¹	Technical Tasks ²	PMC+Technical Tasks
Child Project 1.1 (GEF ID 9684) ³	14,250,000	677,000	760,000	1,437,000
Child Project1.2 (GEF ID 9717)	5,000,000	90,000	-	90,000
Child Project 2.1 (GEF ID 9687)	7,000,000	333,000	90,000	423,000
Child Project 2.2 (GEF ID 9685)	3,500,000	166,000	84,000	250,000
Child Project 3.1 (GEF ID 10158)	1,376,147	65,500	58,500	124,000
Child Project 4.1 (GEF ID 9686)	2,500,000	119,000	95,000	214,000
SCCF Project (GEF ID 9670)	1,000,000	80,000	5,000	85,000
Total GEF Grants	Total GEF Grants 33,626,147		1,092,500	2,623,000
St	affing costs as %:	5%	3%	8%

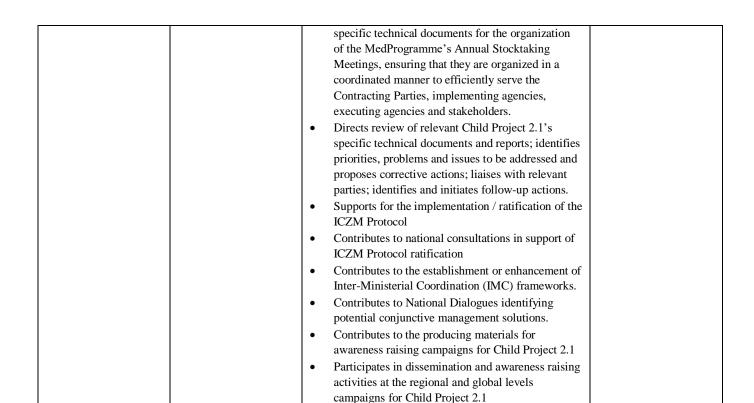
^{1:} Including travel costs of the MedPCU's staff.

Ta le 1 Deliverables and costing of the MedPCU technical support

Position Titles	\$ / Person Month required	Tasks to Be Performed / Deliverables	Related workplan activity				
	PCU Technical su ort						
		International aters					
P MedPro ramme Coordinator	17,900 / 5	 Oversees the technical execution and develop technical products for Child Projects 2.1 Directs the organization of the MedProgramme's Annual Stocktaking Meetings, ensuring that the technical contribution of Child Project 2.1 is enriching the meeting as well as aligned with the other Child Projects of the Programme. Directs review of relevant documents and reports; identifies priorities, problems and issues to be addressed and proposes corrective actions; liaises with relevant parties; identifies and initiates follow-up actions. Directs the preparation of Child Project 2.1's 	Cross-cutting (all Child Project 2.1 workplan activities)				

^{2:} Details of the technical tasks executed by the MedPCU's staff are provided in Table 10 below under the sections A.6 of the GEF CEO Endorsement Request Template

^{3:} Breakdown of the 760,000 allocated for Techcnial Tasks: 485,000 US\$ from CW grants for the Programme Officer CW and 275,000 US\$ from IW grants for the technical support on TDA of the Med POL Officer.



Execution at National Le el The Beneficiaries Countries will designate a National Project Focal Point (NPFP) during the inception phase. The NPFP will act as the liaising person between the government, the EA and EP. The NPFP will be fully involved in the selection of the national consultants and experts which will support the execution of activities on ground under Components 1 and 2 of the Project. The NPFP will also facilitate collaboration with other country offices, as well as the MedProgramme Coordinating Unit (MedPCU). Moreover, special attention will be given in all countries to overcoming fragmentation across sectors in decision making related to project's goals and activities.

Executin Partners (EP) The EP will execute activities of the project that fall within their core areas of expertise. They have been identified among (sub) regional institutions, UN and non-governmental organizations, on the basis of their mandates and broadly recognized roles and comparative advantages of in thematic areas of work relevant to the Project and MedProgramme. Based on these criteria, the EA will establish:

- Inter-agency agreement (Letter of Agreement LOA) with the International Hydrological Programme (IHP) of UNESCO;
- Project Cooperation Agreement (PCA) with the MAP Regional Action Center PAP/RAC
- Project Cooperation Agreement (PCA) with the MAP Regional Action Center and Plan Bleu; and
- Project Cooperation Agreement (PCA)cooperation agreement with the Global Water Partnership Mediterranean (GWP Med).

These arrangements will be established with full consideration of the applicable UN Environment and GEF principles and procedures, including cost-efficiency and effectiveness.

PAP/RAC, Plan Bleu and GWP will be executing the national and regional activities foreseen under Component 1 of Child Project 2.1. UNESCO-IHP will be the executing the national and regional activities foreseen under Components 2 of the of Child Project 2.1.

Please refer to Annex H - Project Implementation Arrangements for further details on the specific roles and tasks of the MedPCU and the Executing Partners.

A.7 ENEFITS. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS. HOW DO THESE BENEFITS TRANSLATE IN SUPPORTING THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS (GEF TRUST FUND) OR ADAPTATION BENEFITS (LDCF/SCCF)?

The project will bring about a wealth of benefits at the national and local levels:

- Improved water security due to the introduction of conjunctive surface and groundwater management practices;
- Higher quantity and better quality freshwater supply thanks to improved knowledge and management of coastal aquifers;
- Improved quality of seawater due to the introduction of ICZM policy frameworks and practices;
- Improved health and better and more sustainable livelihoods of coastal populations resulting from increased water security and introduction of ICZM;
- Enhanced sustainability of coastal zone and shallow marine resources based on the adoption of nation-wide ICZM strategies and plans in compliance to the ICZM Protocol of the Barcelona Convention;
- Improved health and sustainability of coastal habitats (humid zones, wetlands, coastal lagoons, sea grasses, etc.) and of living marine and freshwater resources;
- More sustainable tourism and of other socio-economic activities through the introduction of land-use capability maps;
- Improved gender equality by mainstreaming gender consideration in ICZM policies and practices, and in aquifer management.

These national or local benefits will all be derived through actions also aimed at accruing global benefits in line with the provisions of the GEF Instrument. Global benefits will relate to (i) restored integrity of a globally significant transboundary large marine ecosystem and of its coastal areas through multi-country cooperative actions; (ii) more effective protection of globally significant coastal ecosystem goods and services through enhanced transboundary cooperation.

A.8 NO LEDGE MANAGEMENT. ELABORATE ON THE KNOWLEDGE MANAGEMENT APPROACH FOR THE PROJECT, INCLUDING, IF ANY, PLANS FOR THE PROJECT TO LEARN FROM OTHER RELEVANT PROJECTS AND INITIATIVES (E.G. PARTICIPATE IN TRAININGS, CONFERENCES, STAKEHOLDER EXCHANGES, VIRTUAL NETWORKS, PROJECT TWINNING) AND PLANS FOR THE PROJECT TO ASSESS AND DOCUMENT IN A USER-FRIENDLY FORM (E.G. LESSONS LEARNED BRIEFS, ENGAGING WEBSITES, GUIDEBOOKS BASED ON EXPERIENCE) AND SHARE THESE EXPERIENCES AND EXPERTISE (E.G. PARTICIPATE IN COMMUNITY OF PRACTICES, ORGANIZE SEMINARS, TRAININGS AND CONFERENCES) WITH RELEVANT STAKEHOLDERS.

The Child Project 2.1 will be managed under the umbrella of the MedProgramme, which is composed of eight Child Projects addressing the GEF focal areas of International Waters, Chemicals and Waste, Biodiversity and Climate hange. Effective knowledge management (KM) is a core leveraging mechanism of the MedProgramme to achieve up scaling of approaches, policies and technologies promoted by the Programme at multiple scales. The Knowledge Management Strategy (Annex S) will be implemented under Child Project 4.1 and will support the KM activities of all Child Projects, maximizing their effectiveness in providing opportunities for south-south learning, fostering intergovernmental cooperation, using monitoring and evaluation (M&E) tools and geospatial services, applying best practices and developing portfolio-wide training and communication strategies.

A centralized system coordinated by the MedProgramme Coordination Unit (MedPCU) is designed to capture, digest and share the vast amount of information and knowledge generated across the MedProgramme portfolio with its intended audiences and stakeholders. Each Child Project participates in the common knowledge management (KM) strategy in order to maximize efficiency, ensure good governance of the portfolio and achieve greater impact at the different functional levels identified (portfolio level, general public level and policy- and decision-making level).

The full KM Strategy of the MedProgramme is annexed to each Child Project document for transparency and ease of reference.

While specific needs related to the diverse outputs of the individual projects will be analyzed on a case-by-case basis, all Child Projects are expected to contribute to the overall MedProgramme KM activities as described in the following text (included in the project documents of each of the Child Projects).

M Platform

A web-based knowledge hub comprised of a data and information management system (with both public and restricted access) and a combination of visualization tools to serve the portfolio's needs will be implemented by the MedPCU in close consultation with all Child Projects. The integrated platform will host: (1) a project management/coordination tool; (2) a public portal including sub-webpages for each Child Project; (3) visualization tool(s) to display digitalized representation of data through GIS and other suitable means; and (4) a database for raw/primary data.

Child Projects are expected to contribute to each of these components as follows:

- 1. Upon initiation of the MedProgramme, every Child Project will receive specific training on how to use the project management tool selected by the MedPCU. Features powered by this tool include (but are not limited to): automated reporting, task monitoring, calendars, live editing, Gantt—Charts, time tracking, encrypted security, backups, file management and cloud repository, integration with other products, role-based access control, mobile apps, email integrations, and discussion boards. Project managers (and designated project collaborators) are expected to use the tool to facilitate communication and information exchange throughout the MedProgramme, promote knowledge sharing and peer-to-peer learning, ensure tracking and monitoring of progress, and meet their reporting requirements for the MedPCU.
- 2. The outward-facing portal will be populated with key information showcasing progress towards impact and the contribution of the MedProgramme to global and regional environmental goals. In addition to the umbrella portal, each Child Project will have dedicated sub-pages for their specific projects. The Child Projects are expected to provide regular information (in different multimedia formats) to generate content for their respective project sub-pages and the overall programme portal. The MedPCU will be responsible for curating the information provided and packaging them for the intended audiences.
- 3. One or more visualization tools will be used to display information generated by each project. Different types of data (be them quantitative, normative or qualitative) are best visualized through a variety of ways, such as GIS, story maps, map dashboards, infographics, trend line charts, etc. Child Projects will be prompted to submit their inputs on a rolling basis to make sure that every result/achievement is captured through one or more of these tools.
- 4. A shared data model/protocol will be agreed at the beginning of the MedProgramme to ensure that projects will compile relevant data with a standardized approach and enable a harmonized data entry system. Issues related to open data, ownership, quality and review of data will be addressed in this exercise; a mapping of voluntary standards will help to evaluate feasible options. Raw/primary data will be stored in a database with flexible restricted/public access.

Milestone E ents

Annual Stocktaking Meetings

All project partners are expected to attend, and meaningfully participate in, the Annual Stocktaking Meetings of the MedProgramme. These are major regional events organized by the MedPCU in cooperation with all Child Projects and country representatives and will take place on a rotation basis in different project countries. The meeting will involve: all Child Projects and Governments of the participating countries, the MedProgramme's implementing and executing agencies, the GEF Secretariat and Independent Office of Evaluation (IOE), Convention Secretariats, the UN Environment Global Program of Action (GPA), as well as major regional and global NGOs, representatives of those Mediterranean countries not participating in the MedProgramme, bilateral and multi-lateral donors, IFIs, the UfM, other regional intergovernmental organizations (Sahara and Sahel Observatory, etc.), and major private sector coastal area actors, water users, tourism associations and the shipping industry. Representatives of faith-based leaders, women's organizations, youth organizations, fashion/art/sport testimonials, media specialists, among other relevant groups will also be invited to participate in these events, following a dedicated stakeholders' analysis.

These meetings aim to establish synergistic interactions among Child Projects, and with other relevant initiatives and stakeholders, including with all other Mediterranean countries not participating in the MedProgramme. The Annual Stocktaking Meetings will provide an opportunity to all Child Projects to showcase their implementation advancement,

progress towards impacts and problems encountered, and to engage with a broad audience of peers and stakeholders sharing similar objectives within the overarching goal of achieving environmental security in the Mediterranean Basin. The Annual Stocktaking Meetings will be an occasion for face-to-face knowledge exchanges, south-south and north-south learning, and promotion of the broader adoption of MedProgramme approaches and solutions. The participation of regional and global media will raise public awareness across the Mediterranean countries and beyond. The design, objectives and architecture of the Annual Stocktaking Meetings will be defined during the first year of MedProgramme operation and approved at the Child Project 4.1 Steering Committee level. Child Projects will be informed about modalities for their contributions in detail. The first Annual Stocktaking Meeting will be held during the second year of MedProgramme execution.

GEF events

The MedProgramme will be featured in all relevant GEF events and activities involving the four focal areas addressed by the Programme (International Waters, Chemical and Waste, Biodiversity and Climate Change). For the IW focal area see "Synergies with IW:LEARN".

Global events

Experiences and lessons learned from the MedProgramme will be of relevance for a number of global processes shaping polices related to the sustainable management of natural resources in coastal areas. Participation in selected global and regional events, as well as in significant ongoing awareness raising campaigns, will be evaluated by the MedPCU according to relevance and impact criteria. Child Projects will contribute to these events in different forms, ranging from physical attendance, production of specific products, content and multimedia material to be packaged in suitable products.

Launching/Closing events of the MedProgramme

The design and practical details of these events will be planned during the inception phase of the MedProgramme. Considering the staggered initiation timeframes of the different Child Projects, a launching event of the MedProgramme could be organized in the form of a press conference to coincide with the kick-off of the Support Child Project 4.1. Basic communications material about the objectives of the MedProgramme (such as visual identity, slogan, mission statement, description of Child Projects, informative brochure, short promo video, basic online pages, etc.) should be prepared prior to the launching event. Project managers will be timely informed about practical details of these events and modalities for contribution.

Sharin no led e and uildin ca acit

One of the objectives of the MedProgramme is to improve the capacity of key regional stakeholders and build socio-economic resilience of impacted communities. To this end, a series of knowledge exchanges will take place at different levels taking inspiration and practical lessons learned from the GEF Partnership (reflecting the wealth of experience and examples from projects and programs around the world) and other relevant Organizations involved. At the portfolio level, the MedPCU will capacitate Child Project teams with knowledge and training that can help them to deliver better project results and achieve greater impact. The identification of topics and modalities of exchange (face-to-face, virtual meetings, Communities of Practice, Expert visits, Study Tours, manuals, among others) will be defined at the beginning of the Programme implementation. Preliminary topics could include:

- 1) Gender mainstreaming and stakeholders' engagement;
- 2) Scientific communication: bridging the gap between scientists/technical practitioners and media specialists;
- 3) Lessons learned from the MedPartnership and the ClimVar and ICZM projects.

It is expected that these knowledge exchanges will further empower project stakeholders, enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas.

Additionally, Child Projects will participate in learning exchanges by twinning with other relevant GEF IW projects as facilitated by the GEF IW:LEARN Project (see more below).

Moreover, the MedPCU will support specific capacity building activities foreseen by each Child Project by taking stock and amplifying results through the programme-wide outreach.

Communication outreach and a areness raisin

MedProgramme identity

In terms of visibility, the MedProgramme will be presented in a holistic and coherent way (i.e. clear vision statement and positioning, visual identity, logo design, etc.) showing consistency and integration across the portfolio. At the same time, each Child Project will be granted individual identities within the overall MedProgramme-branding in order to promote specific activities and benefit from ad hoc services. This will entail the design of consistent logos for each Child Project, creation of sub-websites within the MedProgramme web-portal, organization of tailor-made trainings, preparation of specific publications, social media services, among others.

To this end, the MedPCU will develop, in close consultation with project managers of all Child Projects, a proposal and, once adopted, all Child Projects are encouraged to use it consistently.

Newsletters (Med Bulletin)

Periodic MedProgramme Bulletins will be published (every six months or on a quarterly basis) to showcase progress of the Programme as a whole and of individual Child Projects, including highlights of results, success stories and project events, and relevant global, regional and national relevant meetings and events. It will be one of the primary tools for tracking achievement of targets and milestones for all Child Projects, based upon the corresponding results frameworks. Bulletins will feature a "journalistic" style making the content appealing for a wide range of audiences. Therefore, all CPs are expected to contribute to these Bulletins with different types of inputs in order to document their activities and progress, such as high-quality pictures, articles, statistics, quotes, interviews, footage, among others. The MedPCU will inform all Child Projects about the format of these bulletins and the corresponding timelines for submission.

Storytelling for advocacy

A number of traditional storytelling instruments will be blended with innovative and creative approaches to increase dissemination and advocacy efforts. Particular emphasis will be given to the preparation of high-quality short movies and animations, graphic novels, documentaries, podcasts/radio programmes, infographics, digital interactive stories/articles/interviews, microblogging, e-books, art exhibits, among others. The MedPCU will inform Child Projects about the type of multimedia material that will be necessary to collect for the preparation of these products.

Translations of key communications outputs will be carried out in English, French and Arabic to ensure ample dissemination in the participating countries. Specific translations in other national languages will be considered in light of budget constraints and upon due evaluation of stakeholders' needs.

Social Media

Facebook, Instagram, YouTube and Twitter are four social media tools suggested for use by the MedProgramme. Development of timely and appropriate content and material to populate these channels is indispensable to achieve the desired impact. CPs will be prompted to contribute with relevant and ad-hoc information, pictures, statistics and other data to enrich the social media campaign.

The use of hashtags will be coordinated with the GEF IAs and EAs and project and country representatives of the Programme in support also of other related initiatives and campaigns.

The registration on the above-mentioned channels (or a selection of them) will take place at the beginning of the Programme and content population will start as soon as data and information from the projects becomes available.

Engagement with media and testimonials

To maximize impact of the MedProgramme and share its findings and results with the widest possible audience, the MedPCU aims to reach out to a different number of media outlets and journalists with a view to establish long-lasting collaborations. To this end, Child Projects will be asked to facilitate contacts with national and local media of the countries where the activities are implemented (for instance, by providing the MedPCU with a list of relevant contacts). A series of direct interactions with communications specialists, media experts and social media influencers is foreseen by the KM Strategy throughout the duration of the Programme to increase mutual understanding and flow of information.

The MedPCU also aims to reach out to renowned personalities from different realms (such as art, sports, entertainment or fashion) to act as ambassadors for the MedProgramme and raise awareness about the main environmental challenges (and solutions) in the coastal areas of the Mediterranean. The Child Projects will be prompted to suggest names, and facilitate contacts when possible, of suitable and potential "goodwill ambassadors" of relevance in the region.

S ner ies ith the GEF I LEARN and LME LEARN Projects

The MedProgramme will closely collaborate with the GEF International Waters Learning and Resource Exchange Network (IW:LEARN) Project²⁶ to facilitate uptake of lessons learned and knowledge exchange from/to the MedProgramme portfolio.

Cooperation in the following activities will be particularly addressed:

- Participation to the GEF International Waters Conferences (landmark biannual events of the IW portfolio). The first MedProgramme contribution is expected for the 10th edition of the IWC in 2020.
- Production of Experience Notes (short case studies) produced by Child Projects to showcase worthy results and disseminated through IW:LEARN channels and the MedProgramme KM platform. The format of Experience Notes is standard (https://iwlearn.net/documents/experience-notes)
- Participation to IW:LEARN Twinnings with other GEF relevant projects and programs.
- Contribution to IW:LEARN.net with specific content (i.e. data visualization).
- Contribution to social media, news, events, etc.
- Participation to GEF Communities of Practice (CoPs) on IW, CW, when relevant.

Stren thenin the Science Polic Interface (SPI) and Influencin Decision Ma in

Replication Atlases

A number of highly informative National Replication Atlases, translated in relevant languages, will be produced to stimulate replication of successful practices demonstrated by the Programme and encourage regional and global dialogue. Broader adoption and replication of the successful policies, practices and technologies implemented under the Programme will be promoted through these means, highlighting areas and situations where replication of the Programme's demonstrations should preferentially occur.

Relevant results of Child Projects will be featured in the Atlases and the MedPCU will inform about the participatory process to collect and present the inputs.

Technical reports and scientific publications

The MedPCU will ensure that relevant scientific reports and scientific peer-reviewed publications are prepared by the various CPs providing technical information about the achievements of the Programme.

Specific guidance on how to concretely contribute (format, frequency, purpose, etc.) to each of the aforementioned activities will be provided during the initial phase of the Programme as a result of targeted consultations carried out by the MedPCU.

S ecific s ner ies ith Child Project 2.1 re ardin no led e mana ement

Child Project 2.1 has the overall objective to *improve water security*, *human and ecosystem health*, *and climate resilience in coastal hot spots*, and features two main outcomes:

- 1. Coastal zone sustainability in beneficiary countries enhanced through the expanded compliance with the ICZM Protocol and the adoption of national ICZM strategies, coastal plans and instruments, and improved gender equality.
- 2. Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater-related coastal habitats.

A large effort is dedicated to raising awareness about the current and projected pressures on water resources, in particular on aquifers as major freshwater resource, and on ecosystems in coastal areas in order to strengthen the policy-

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²⁶ More info at www.iwlearn.net

science interface and influence positive individual and collective behavior. Awareness raising will focus on the interconnected themes of natural habitats, biodiversity and landscapes, and the emissions of nutrients and wastewater, solid waste, marine litter and microplastics, and industrial waste into the environment. Future sustainability will depend on the proper management of natural resources based on a nexus (space/water/food/energy/ecosystem) approach and the integrated coastal zone management (ICZM) principles, thus allowing integration between environmental protection with spatial planning and economic development. The active participation and empowerment of all stakeholders concerned is key to unravel the interconnected challenges faced in coastal areas, hence capacity building and awareness raising are fundamental ingredients to shape a responsible society. The stakeholders' analysis foreseen at the beginning of the project will be very important to target KM beneficiaries/providers, provide adequate information and facilitate active involvement in the project activities.

The portfolio-wide architecture developed for the KM of the MedProgramme will support these efforts to amplify the project results and maximize their impact at all functional levels identified (internal, corporate and external).

As the project will produce a number of detailed assessments (for example, pioneering the inventory and mapping of submarine groundwater discharges and marine/freshwater interactions) as well as other data needed for the elaboration of ICZM plans, this information will be featured using GIS-based and other types of visualization tools in the MedProgramme KM online platform and also "digested" and packaged in different outreach products. The most suitable instruments to visualize project results and different types of quantitative and qualitative data (which include but are not limited to number of hectares of landscapes and seascapes under improved management; number of countries implementing comprehensive ICZM and Sustainable Consumption and Production approaches, including Coastal Zone Use-Capability mapping; number of persons, reflecting gender balance, trained on integrated approaches, ICZM, MSP, and adaptation to climate variability and change; number of persons, involved in awareness raising activities; number of priority coastal aquifers and related habitats under improved conjunctive surface and groundwater management; number of countries where nation-wide dialogue on conjunctive surface and groundwater management solutions have been initiated; number of national inventories of submarine groundwater discharges (SGD); number of priority coastal areas that develop nexus assessments and endorse a Nexus Strategy/ Action Plan; number or transboundary basins and aquifers in which cooperation is enhanced; number of bankable projects for priority interventions and investments).

Revealing, understanding and implementing the actions needed to achieve sustainable management of the coastal zone and the conjunctive management of surface and groundwater resources are two fundamental aspects of this project. The actions foreseen to raise awareness and capacitate relevant stakeholders will be supported under the MedProgramme KM strategy through specific modalities to be identified and agreed upon at the beginning of the project (surveys, bilateral consultations, face-to-face meetings and virtual exchanges will facilitate the analysis and identification of best ways forward).

At a minimum, the following activities of Child Project 2.1 will be coordinated with, and benefit from, the overall KM strategy:

- MedOpen (online) courses on the implementation of comprehensive ICZM policies and practices developed by the project: the information about these courses will be prominently featured in the MedProgramme platform and promoted in all relevant events and occasions;
- Celebrations for Coast Day (25 September) will be amplified through the MedProgramme channels and included in the overall plan to observe relevant International Days of importance for the Programme with dedicated actions and initiatives; a special consideration will be given to work in synergy with the ICZM Mediterranean Awareness-Raising Strategy (MARS);
- Preparation and implementation of three awareness raising campaigns on Coastal Resilience, Coastal Aquifers and Women in Coastal Management: these will be further supported by the overall strategy and complemented with additional material when/if relevant.
- Organization of National Dialogues to discuss potential conjunctive management solutions (one for each of the five priority aquifers): these events are very relevant at all levels of the KM strategy, in terms of peer-to-peer learning within the MedProgramme portfolio, showcasing cooperation in action at the GEF level, and of knowledge sharing

with all relevant audiences and stakeholders about the progress made. The results of these events will be featured and documented through all relevant means implemented by the KM strategy (such as MedProgramme newsletters, National Atlases, Experience Notes, videos, articles, infographics, social media posts, among others).

Design and delivery of trainings: the MedProgramme KM strategy will give resonance to the results of this series of
trainings organized by Child Project 2.1 spanning from modules on conjunctive surface and groundwater
management, to modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial
planning, and land use change analysis, and to monitoring technology, protocols, maintenance, sampling protocols
and reporting. Appropriate promotion will be done using MedProgramme instruments and channels in close
coordination with project managers.

Child Project 2.1 works in close synergy with the SCCF Project as well as Child Project 2.2 under Component 2 of the MedProgramme "Enhancing Sustainability and Climate Resilience in the Coastal Zone", which has as its purpose to assist countries, coastal zone managers and populations to adapt to evolving climatic conditions threatening sustained freshwater supply, and to introduce land use policies and development practices respectful of the intrinsic vulnerabilities, gender equality, natural and cultural functions, freshwater-seawater interactions, and geological processes characterizing the diverse Mediterranean coastal zones. Specific actions to emphasize results at the Component level will be addressed by the MedProgramme KM strategy and those responsible for Child Projects 2.1 and 2.2 and the SCCF Project will be requested to contribute and provide inputs to this end.

. Descri tion of the consistenc of the roject ith

.1 CONSISTENC IT NATIONAL PRIORITIES. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS SUCH AS NAPAS, NAPS, ASGM NAPS, MIAS, NBSAPS, NCS, TNAS, NCSAS, NIPS, PRSPS, NPFE, BURS, INDCS, ETC.:

The project will adhere to the priorities set forth by the countries in their national strategies and action plans for the implementation of the provisions of the Barcelona Convention and ICZM Protocol, will implement SAP-MED and NAPs priority actions, and address issues of transboundary concern identified by the TDA and agreed upon by the countries. A synopsis of the priorities and gaps related to coastal zone management and coastal aquifers of each project country is provided in section 2b: Baseline Scenario in Project Countries.

C. DESCRI ET E UDGETED M E PLAN

Project execution performance will be monitored through the following standard GEF M&E activities. The associated M&E budget and work plan is provided in Annex G-M&E Budget and Work Plan.

Project start

A Project Inception Workshop will be held within the first 8 months of project start, with participation of those with assigned roles in the project organization structure. The Inception Workshop is crucial to building ownership for the project results and to plan the annual work plans for the first 2 project years. It is anticipated that the Inception Workshop will also be the de facto first meeting of the Project Steering Committee.

The Inception Workshop will address a number of key issues including:

- 1. Assisting all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UN Environment, MAP and MedPCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms.
- 2. Based on the Project Results Framework and the International Waters GEF Tracking Tool, the Annual Work Plans for the first two years will be finalized. Indicators, targets and their means of verification will be reviewed, revised (as needed) and agreed, and assumptions and risks will be re-checked.
- 3. A detailed overview of reporting, monitoring and evaluation (M&E) requirements will be provided. The Monitoring and Evaluation work plan budget will be agreed and scheduled.
- 4. Financial reporting procedures and obligations will be discussed.

Project governance meetings will be planned and scheduled, and the overall project governance mechanisms will be reviewed and further fine-tuned, giving particular attention to cost-efficiency, enhanced stakeholder ownership, and the continuity of efforts towards SAP implementation beyond the project life span. Roles and responsibilities of all project organization structures will be clarified, and a meeting/reporting calendar will be elaborated.

Together with the GEF approved Project Document, the Inception Workshop Report will constitute a key reference document for the Project and will be prepared and shared with participants to clarify and formalize various agreements and plans decided during the meeting.

Annuall

11. Annual Project Review/Project Implementation Report (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (1 July to 30 June). The APR/PIR combines both UN Environment and GEF reporting requirements.

The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes each with indicators, baseline data and end-of-project targets (cumulative);
- Project outputs delivered per project outcome (annual);
- Lesson learned/good practice;
- Annual Work Programme (AWP) and other expenditure reports;
- Risk and adaptive management; and
- GEF International Waters Tracking Tool indicators.

The text that follows presents the approach to be followed for the Mid Term Evaluation (MTE) and Terminal Evaluation (TE) of Child Project 2.1. In application of the cost efficiency and synergistic principles of the GEF Programmatic Approach, the Child Projects of Component 2 of the Programme will be reviewed/evaluated jointly. This Component is dedicated to ICZM, IWRM, coastal aquifers, Climate Change Adaptation and the Water-Food-Energy and Ecosystem Nexus. For this reason, the Child Project 2.1 will be evaluated together with the Child Project 2.2 and the SCCF Project. Each of the Child Projects will contribute with a specific budget to both the joint MTE and TE. Consequently, a total collective budget of 235,000 USD is allocated for this purpose.

Mid term of roject c cle

In-line with UN Environment Evaluation Policy and the GEF's Monitoring and Evaluation Policy the project will be subject to a Terminal Evaluation and, additionally, a Mid-Term Review will be commissioned and launched by the Project Manager before the project reaches its mid-point. Based on the conclusion of the Mid-Term Review, the Evaluation Office will determine, whether an independent Mid Term Evaluation (MTE) is required at the mid-point of project implementation. If the decision is to proceed with an independent Mid-Term Evaluation, this will assess the progress made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; it will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the Mid-Term Evaluation will be decided after consultation between the parties. The Terms of Reference for this Mid-Term Evaluation will be prepared by UN Environment

Information in the GEF International Waters Tracking Tool will also be updated during the mid-term evaluation cycle.

End of Project

The Evaluation Office will be responsible for the Terminal Evaluation (TE) and will liaise with the Task Manager and Executing Agency(ies) throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment, the GEF, executing partners and other stakeholders. The direct costs of the evaluation will be charged against the project evaluation budget. The Terminal Evaluation will be initiated no earlier than six months prior to the operational completion of project activities and, if a follow-on phase of the project is envisaged, should be completed prior to the submission of the follow-on proposal. Terminal Evaluations must be initiated no later than six months after operational completion.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized and further reviewed by the GEF Independent Evaluation Office upon submission. The evaluation report will be publically disclosed and may be followed by a recommendation compliance process.

PART III CERTIFICATION GEF PARTNER AGENC (IES)GEF A enc (ies) certification

This request has een re ared in accordance ith GEF olicies²⁷ and rocedures and meets the GEF criteria for CEO endorsement under GEF 6.

A enc Coordinator A enc Name	Si nature	Date (MM dd)	Project Contact Person	Tele hone	Email Address

²⁷ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

LIST OF ANNE ES C ILD PRO ECT 2.1

- Annex A Project Results Framework CP2.1
- Annex GEF Secretariat Review Sheet CP2.1
- Annex C status of implementation of PPG CP2.1
- Annex D calendar of expected reflows CP2.1
- Annex E Consultants to be hired CP2.1
- Annex F1 Detailed GEF budget template CP2.1
- Annex F2 Detailed GEF co-financing template CP2.1
- Annex G M&E Plan and Budget CP2.1
- Annex Project Implementation Arrangements
- Annex I Key Deliverables and Benchmarks CP2.1
- Annex OFP Endorsement Letter MedProgramme
- Annex 1 CO-FINANCING COMMITMENT LETTERS FROM PROJECT PARTNERS CP2.1
- Annex 2 CO-FINANCING COMMITMENT LETTERS FROM COUNTRIES CP2.1
- Annex M ACRONYMS AND ABBREVIATIONS CP 2.1
- Annex N Project Implementation Timetable CP2.1
- Annex O Gender Assessment and Gender Action Plan CP 2.1
- Annex P Complete list of Stakeholders for CP2.1
- Annex Damour municipality description CP2.1
- Annex R Reports of the stakeholder consultations for CP2.1
- Annex S MedProgramme Knowledge Management Strategy
- Annex T MedProgramme Gender Mainstreaming Strategy
- Annex U Figures Tables and Text Boxes for the GEF CEO ER CP2.1

ANNE A PRO ECT RESULTS FRAME OR (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

	MEDITERRANEAN SE	A PROGRAMME EN ANCING E	ENVIRONMENTAL SECUR	RIT	
MedPro ramme O jecti e	affectin the Mediterran	nentation of a reed u on riorit ac ean Sea and its coastal areas hile s d li elihoods of coastal o ulations			
M	edPro ramme Com onent	2 Enhancin Sustaina ilit and C	limate Resilience in the Coas	tal one	
Child	Project 2.1 Mediterranea	nn Coastal ones Climate Resilience	ater Securit and a ita	t Protection	
Project O jecti e	O jecti e le el Indicators	aseline	End of Project Tar ets	Means of Verification	Assum tion Ris s
Enhancing Sustainability and Climate Resilience in the Coastal Zone	Number of hectares of landscapes under improved management and climate resilience, taking a source - to - sea approach.	Most countries lack adoption and /or implementation of comprehensive ICZM strategies, plans and practices, and of consideration of the role of coastal aquifers in sustaining livelihoods and biodiversity and buffer the impacts of CV&C.	At least 12,500,000 hectares of landscapes under improved management.	Four () Comprehensive ICZM strategies /plans and five (5) Coastal aquifer management plans adopted or in the process of adoption.	Sustained political support from countries throughout the project
		Com onent 1 Coastal one Mana	ement		
Outcome 1 (MedPro ramme Outcome)	Outcome Indicators	aseline	Tar ets and Monitorin Milestones	Means of Verification	Assum tion
Coastal zone sustainability in beneficiary countries enhanced through the expanded compliance with the ICZM Protocol and the adoption of national ICZM strategies, coastal plans and instruments, and improved gender equality.	1.1 Number of additional countries where the ICZM Protocol ratification process is under way or completed or implementation advanced.	ICZM protocol (not yet ratified by four (4) out of eight (8) project countries)	ICZM Protocol ratification process under way in three (3) additional countries and advancement in implementation documented in three (3) additional countries with methodologies to support Protocol implementation enhanced.	Documentation related to the ratification and implementation process.	Countries willing to engage in the ratification process of the ICZM Protoco and to take action on the ground to improve coast resources

	T				I
					management.
	1.2 Number of countries	Coastal Strategies/plans tested in	At least four (4) countries	ICZM	Relevant
	implementing	two (2) countries	implementing ICZM	Strategy/plan	authorities, and
	comprehensive ICZM including Coastal Zone	(MedPartnership)	strategies, plans and	related published documents, and	key stakeholders
	Use-Capability	Integrative Methodological	approaches.	meeting reports	actively
	mapping.	Framework for coastal zone, river		meeting reports	participate in
	mapping.	basin and aquifer management			the
		(IMF) tested under the			development
		MedPartnership.			and
		Treat withership.			implementation
					of ICZM
					strategies and
					plans.
	1.3 Number of persons,	Three (3) regional trainings	At least 300 persons	Training materials	Persons
	reflecting gender	delivered in the framework of	trained, reflecting gender,	Training reports	receiving
	balance, trained on	MedPartnership and ClimVar &	on ICZM, MSP and CVC	Training feedback	training
	integrated approaches,	ICZM projects	adaptation.	List of	represent major
	ICZM, MSP, and			participants	stakeholders,
	adaptation to climate				relevant
	variability and change.				national
					government bodies, and
					local
					administrators
	1.4 Number of persons,	ICZM awareness raising and	At least 1,000 persons	Local and	Participants
	involved in awareness	marketing strategy prepared	involved in awareness	national media	represent a
	raising activities.	2 23 1 1	raising activities on coastal	report on	broad spectrum
			resilience and	MedProgramme	of stakeholders
			sustainability.	and ICZM	and public
					opinion
					makers.
	Com onent 2	Mana ement of Coastal Aquifers and	l Related Ecos stems		
Outcome 2	Outcome indicator	aseline	Tar ets	Means of	Assum tions
(Pro ram Outcome)				erification	
Increased resilience to climatic	2.1 Number of priority	An inventory and preliminary	At least five (5) priority	Aquifer	A: Countries
variability and change, and	coastal aquifers and	assessment of all major coastal	coastal aquifers and	management	and coastal
enhanced water security of	related habitats under	aquifers and related ecosystems	related ecosystems under	plans submitted	zone
coastal populations through	improved conjunctive	already exists (MedPartnership). No	improved conjunctive	for adoption at	administrators
improved sustainability of	surface and groundwater	aquifer specific management	surface and groundwater	local/national	committed to
services provided by coastal	management.	framework is in place in any of the	management.	level	the

aquifers and by groundwater- related coastal habitats.		littoral countries.			implementation of the Plan
	2.2 Number of countries where nation-wide dialogue onconjunctive surface and groundwater management solutions have been initiated.	Conjunctive surface and groundwater management approaches are new to the beneficiary countries and the region as a whole.	At least three (3) countries have initiate nation-wide dialogues on conjunctive surface and groundwater management solutions.	Dialogue reports	Broad stakeholders' participation ensured
	2.3 Number of national inventories of submarine groundwater discharges (SGD).	None of the project countries have conducted inventories of submarine groundwater discharges.	All nine (9) participating countries complete SGD inventory.	SGDs Inventories reports	National academia support SGD assessment efforts

ANNE GEF SECRETARIAT REVIE S EET

No specific comments and the activities, outputs and outcome of Child Project 2.1 were made by the STAP or the council at PFD stage. For ease reference the following table reports the comments made by the STAP on the activities, outputs and outcomes of the entire Medprogramme and the feedback provided by the Programme.

Comments of STAP and Counil at PFD sta e and ans ers ro ided the MedPro ramme.

Comment recei ed	Res onse at CEO Endorsement
PFD Re ie Sheet	
The majority of comments received in the Review Sheet for the PFD w 'Addressed' in the Review Sheet. Some comments that remained are summarized below:	were all addressed at that time and were recorded as
Please change the submission in the country section, where it is noted to be a GLOBAL project. The project is regional, with participating countries having included endorsement letters.	Done in the portal submission.
In regard to chemicals and waste, please provide a description of the baseline projects in relation to PCBs and POPs chemicals	Please refer to the National Baseline tables and Baseline sections in the CEO Endorsement Request
A detailed M&E plan should be presented at the time of CEO endorsement.	Please refer to Section C of the CEO Endorsement Request and budget.
STAP Re ie	
The need for the proposed Programme is understood by STAP to be a demand for a coordinating mechanism for the implementation of actions identified through the MedPartnership project.	The actions that will be addressed in the MedProgramme were defined by the Countries after a long and complex participatory TDA-SAP process leading to the National Action Plans where all the major stakeholders at national level were involved along with the major decision makers and political institutions. The MedPartnership was instrumental in supporting the final phase of this process in order to ensure that the NAPs were developed by the countries in a coordinated and efficient sound manner.
The updating of the TDA proposed in Child Project 1.1 should not be permitted to distract from the implementation of the two agreed SAPs and various NAPs.	It will not, activities which address the SAPs and NAPs will be mainly implemented under CP1.2, 1.3, 2.1, 2.2 and 3.1. The CP 1.1 will work on POP and Hg, moreover it will ensure to put in place all the diagnostic tools that can help us to measure the progress to impact; being the updated TDA one of those.
It is not clear from the PFD that the child projects proposed have been designed in a participatory manner with national and local stakeholders, particularly with civil society representatives and community groups. The PFD still reads as largely a top-down document and proponents need to address this deficit, regarding roles, responsibilities and accountabilities of stakeholders especially at sub-national level.	As stated in the STAP "the Programme followed the successful implementation of the MedPartnership". The MedProgramme has been developed by request fo the countries and with an approach that considers all the major stakeholders who will be instrumental to the implementation of the proposed activities. For example, for the investment component, both EIB and EBRD, will use the NAPs which has been endorsed at national level with a bottom-up approach involving a wide number of stakeholders at national and local level. The same applies to the conjunctive surface and groundwater management which will be implemented in those countries that recognized its importance through processes which involved (under the MedPartnership) the main stakeholders.
It is not clear from the PFD that the child projects proposed have been designed in a participatory manner with national and local stakeholders, particularly with civil society representatives and community groups. The PFD still reads as largely a top-down document and proponents need to address this deficit, regarding roles, responsibilities and accountabilities of stakeholders especially	As stated in the STAP "the Programme followed the successful implementation of the MedPartnership". The MedProgramme has been developed by request of the countries and with an approach that considers all the major stakeholders who will be instrumental to the implementation of the proposed activities. For example, for

at sub-national level.	the investment component, both EIB and EBRD, will use the NAPs which has been endorsed at national level with a bottom-up approach involving a wide number of stakeholders at national and local level. The same applies to the conjunctive surface and groundwater management which will be implemented in those countries that recognized its importance through processes which involved (under the MedPartnership) the main stakeholders.
Therefore, the entire Programme design should provide for sufficient flexibility and appropriate adaptive management strategies to counteract political instability and continuously changing circumstances of the countries in the Mediterranean region	The adaptive management strategy at the MedProgramme level relies on one major tool, the Annual Stocktaking Meetings, part of CP 4.1 (output 2.2). Through these major meetings all issues of concern related to changes in political will or instability in the recipient countries will become manifest and allow for timely adaptive management responses at both the Child Project and at the Program levels.
During the further preparation of the Programme and its individual projects, STAP strongly recommends using a common analytical approach using scenarios to explore possible futures and identify specific intervention points for most impactful programme/project interventions.	Done. In the selection of the many hot spots addressed by MedProgramme, a homogeneous approach has been adopted including future scenarios, whenever necessary.
Ecosystem-based adaptation solutions could be explored.	Done. Nature based solutions, and circular economy approaches inform a number of CPs, in Particular CP 1.2 and 2.1.
Recognizing the current regional security context, STAP recommends developing further cooperative and transboundary infrastructure to protect human security of refugees and migrants by e.g., supporting livelihoods diversification among human traffickers.	The implementing and executing partners of the MedProgramme fully recognize such much needed actions, however based on discussion with the GEF Secretariat during the development phase such kind of actions do not seem to be under GEF mandate. Nevertheless, we believe that by increasing environmental security, the MedProgramme will indirectly strive improve the conditions of migrants, and regional stability.
Many of the Programme interventions are best described in the framework of the Source to Sea concept. Programme proponents are advised to consult the recently released Source to Sea conceptual framework to consolidate and design further often loosely connected activities of the Programme (available at: http://www.thegef.org/council-meeting-documents/conceptual-framework-governing-and-managing-key-flows-source-sea-continuum).	The source to sea conceptual framework, coupled with the GPA guidelines, has clearly inspired the MedProgramme design, which builds on the 40 years' experience, data, information and country ownership produced by the Barcelona Convention.
A priority not dealt with in Component 4 is provision of support to participating countries to incentivize application of IMAP to policy reform or implementation.	The IMAP has been endorsed by the Contracting Parties to the BC in February 2016. All the countries made provision for its implementation at national level. The intention of the MedProgramme is to support and coordinate part of this process at regional level. This will happen especially under CP1.1. Moreover, CP4.1 will implement a KM Strategy which on top of bring benefit to the Programme is also helping the countries to manage the data and information produced by the child project and transfer them, as needed, to the Barcelona Convention IMAP process.
The PFD does not provide substantive evidence of ownership (the word is missing from the entire document), beyond the formal country endorsements, and as is the case with regional projects in general, an emphasis on the demand side needs to be more fully demonstrated, especially for the proposed child projects.	On the contrary, the Programme builds on over 20 years of GEF IW involvement in supporting the TDA-SAP-NAPs process, and on the actions of the Barcelona Convention and of its Regional Activities Centres. This has ensured a level of country ownership rarely achieved in previous efforts globally.
There should also be consideration of potential non industrial sources of POPs and other toxic chemicals, and seeking out of the	The Chemicals and Waste component addresses non- industrial use of PFOS by fire fighting services, in line with

potential role of Integrated Pest Management (IPM) techniques to minimise use of pesticides in agriculture, horticulture, general pest control, vector control, structural preservation treatments and others.

Where there are data gaps as relates to chemicals pollution, there should be careful retention of such data in the course of implementing this project, as well as key lessons learned in the course of implementation of methods to curtail chemicals pollution from various sources, including the impacts of climate change and variability on the concentration and behaviour of harmful chemicals.

the priorities expressed by countries in their NIPs. Country NIPs do not prioririze

The Child Project 1.1 includes data compilation using a GIS platform on waste inventories and for tracking of disposal progress. It also proposes collection of data on gender aspects of exposure to these waste sites. Finally it will produce lessons learnt on prevention of new POPs and mercury.

Through the links with Child Project 4.1 these knowledge products will be retained systematically in the wider KM systems and made available for stakeholders.

GEF Council

Germany on OUTCOME 1: Reduction of land-based pollution in priority coastal hotspots and measuring progress to impacts. Germany suggests expanding the suggested focus on chemicals pollution (in particular POPS, PAHs, and mercury) to include also non-industrial sources of POPs of high relevance. Furthermore, a more detailed analysis for each country (how effective support and coordination will be reached) is recommended for better monitoring and evaluation purposes.

The reduction of land Bases Sources of pollution (LBS) and measuring of progress to impact in the Mediterranean Sea is based on a 15 years cycle stated with the Transboundary Diagnostic Analysis, followed by the preparation and endorsement by the countries of the Strategic Action Plan (SAP) for LBS (SAP-MED) and for Biodiversity (SAP-BIO). The implementation of the two SAPs led to the definition of national Action Plans were the hotspots of intervention in terms of LBS are clearly indicated and agreed upon by the countries. Unfortunately, this process did not included the tracking, monitoring and identification for POPs, PAHs and Mercury., Nevertheless, the Child Project 1.1 (GEF ID 9684) of the MedProgramme addresses non-industrial use of PFOS by firefighting services, in line with the priorities expressed by countries in their NIPs. Country NIPs do not prioritize. Moreover, the work done by the Barcelona Convention on defining stocks of POPs and Hg in the Mediterranean countries, together with the further development of this information under the MedProgramme will allow a huge step forward in the region to support the countries in their effort of addressing this issue.

Germany on OUTCOME 4: Germany welcomes the promotion of an integrated coastal zone management (ICZM). Participatory management, thus the empowerment of user groups into the management decisions as well as the surveillance and monitoring is crucial for the projects' success. A stronger emphasis on alternative livelihoods for fishing communities is recommended.

Child Project 2.1 (GEF 9687) focuses on major coastal wetlands, lagoons, humid zones and coastal habitats, providing very valuable services and contributing to coastal livelihoods and biodiversity, are all in part or totally dependent on groundwater regimes. This included livelihoods for fishing communities. Moreover, being the MedProgramme executed under the umbrella of the Barcelona Convention, it will benefit of the ongoing partnership between the Convention and the General Fishery Commission of the Mediterranean which will introduce elements related to fishing in the Programme.

Germany on OUTCOME 7: Germany welcomes the improvement of management capacity as well as the expansion of the Libyan Marine Protected Areas (MPA). It is recommended to incorporate the high importance of artisanal fisheries for local food security and livelihoods. The MPA management plan should imply buffer zones between the MPA and fishing areas. In these small strips local fishermen communities can use an exclusive access (ban for industrial fisheries) and benefit from extensive fisheries. Involvement of fishermen in the management of marine protected areas is crucial for their sustainability.

Artisanal fisheries is included in Child Project 3.1 (GEF ID 10158), concretely in its output 31 where the importance of artisanal fishery is recognized and supported by several activities such as the preparation and dissemination of a set of communication material to promoting artisanal sustainable fishery heritage in and around the selected MPAs.

Germany on the MedProgramme: Lobbying for a higher political prioritization of the implementation of national fishery policies and

Although this activity is not directly included in the MedProgramme (which mainly addresses the priorities

frameworks promoting sustainable marine resource management.	defined by the Mediterranean Countries under the Protocols of the Barcelona Convention), implementation of national fishery policies and frameworks promoting sustainable marine resource management it is focus of the collaboration partnership between the Convention and the General Fishery Commission of the Mediterranean. Outcomes and outputs of this partnership will be linked to the MedProgramme.
Germany on the MedProgramme: 'Blue Carbon' offsets as an economic potential for coastal villages.	Although we recognize the importance of the comment made by Germany, 'Blue Carbon' offsets as an economic potential for coastal villages is not in the scope of the MedProgramme. However, being the Programme executed in the wider framework of the Barcelona Convention process linkages with Blue Carbon offset and related matter will be explored and certainly made if appropriate.
Germany on the MedProgramme: Decentralized adaption strategies for the intrusion of saline groundwater into aquifers. In sunny areas PV-driven small-scale desalination plants could allow local approaches.	Although we recognize the importance and tehcnial relevance of the comment made by Germany, desalination plan/processes/standards are not eligible under GEF 6 therefore have been removed by the Programme. Nevertheless, under Child project 1.2 (GEF ID 9717), the Barcelona Convention will develop common environmental standards on desalination for the Mediterranean Region by using NON-GEF funds. These standards will be submitted to the Conference of Contracting Parties of the Convention for consideration. If approved they will be the first step to support the approach suggested by Germany.
Germany on the MedProgramme: The involvement of wastewater reuse and freshwater consumption reduction strategies.	Child Project 1.2 (GEF ID 9717) is promoting investments at national level will focus on WWTP Extension and upgrade including treated wastewater reuse/reinjection (MAR) to decrease water consumption in the countries where national actions will take place (Egypt, Lebanon and Tunisia). Moreover the same Child Project will develop regional standards on wastewater management (including reuse) for deliberation of the Contracting Parties of the Barcelona Convention.
Germany on the MedProgramme: More investments into wastewater-treatment facilities for the reduction of heavy metals, endocrine disrupters, plastic and other pollutants as runoff in the Mediterranean Sea.	Under Child Project 1.2 (GEF ID 9717) EIB will mobile more than USD 600M in investments on WWT facilities in Egypt, Lebanon and Tunisia. Moreover, the MedProgramme is already generating interest of other potential investors to engage in advanced WWTP in the region to achieve reduction of LBS of pollution and increase climate change adaptation resilience.

ANNE C STATUS OF IMPLEMENTATION OF PRO ECT PREPARATION ACTIVITIES AND T E USE OF FUNDS¹

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PFD: 2					
		GETF/LDCF/SCCF/CBIT Amount (\$)			
Project Preparation Activities Implemented	Budgeted Amount	Amount Spent To date	Amount or Committed	Amount planned till the end of the PPG phase	
International Consultants - 1 Technical and 1 Project Preparation Experts + 1 Knowledge Managemnet and 1 Gender Specialists.	48,000	43,175	6,500		
Travels to support the preparation of the CP2.1.	22,000	12,588	6,408	3,004	
Sub-Contracts with Executing Partners to support the preparation of the CP2.1 Components 1 and 2.	120,000	64,039	55,961		
Organization of national and regional Consultation Meetings.	10,000	1,550		6,360	
Contractual Services		415			
Total	200,000	121,767	68,869	9,364	

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNE	D	CALENDAR OF E	PECTED REFLO	S	(if non-grant instrument	is used)
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Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

N/A

ANNE E Child Project 2.1 Deli era les and costin of the consultants to e hired

Position Titles \$ / Person Month, Est Person Month		Tasks to Be Performed / Deliverables	Related workplan activity
		Consultants	
		International aters	
Re ional consultants I	7,300 / 17	 Researches, analyzes and presents information gathered from Child Project 2.1 Prepares various written outputs, e.g. draft background papers, analysis, sections of reports and studies, inputs to publications, GEF Experience Notes, summaries for policy makers, etc., related to Child project 2.1. Assists with the organization of the MedProgramme's Annual Stocktaking Meetings, helping to ensure that Child project 2.1 is properly contributing and benefitting from the meeting Provides technical contributions related to Child Project 2.1 for the Steering Committees, including the preparation of background and working documents and drafting of meeting reports, etc. Undertakes survey initiatives; designs data collection tools; reviews, analyzes and interprets responses, identifies problems/issues and prepares conclusions for Child project 2.1 Contributes to the design of regional trainings in support of ICZM Protocol implementation, IWRM and conjunctive management of coastal aquifers Contributes to the development of the conceptual framework for coastal observation Contributes to the preparation of one Integrated Management Plan (IMP), according to the IMF methodology (Damour, Lebanon). Contributes to the comprehensive vulnerability assessment and associated management recommendations 	Cross-cutting (all Child Project 2.1 workplan activities)
Re ional consultant no led e Mana ement	6,700 / 11	 Liaises with the Executing Partners (EPs) of Child Project 2.1 in order to collect, analyze, harmonize, package and share data and information generated by the Project and support the achievement of related objectives. Provides technical advice and improve capacity of the Child Project 2.1 team to 	Cross-cutting (all Child Project 2.1 workplan activities)

		 address specific needs and effectively manage knowledge at the Project and Programme levels. Prepares an Action Plan (including timeline and budget) for the duration of the Child Project 2.1 and supports the execution of both KM Strategy and Action Plan; Facilitates MedProgramme contribution of Child Project 2.1 to IW:LEARN activities (including participation to the International Waters Conferences and twinnings, preparation of Experience Notes, among others) and other GEF relevant initiatives and events, particularly related to the focal areas of International Waters Supports the communications of Child Project 2.1 and outreach components of the KM Strategy. Develop Knowledge Management analysis for Child Project 2.1 as relevant. 	
Re ional consultant Gender Ex ert	6,700 / 9	 Provides gender-responsive inputs for the ICZM protocol ratification that are underway, and for the implementation for those that have been processed. Develops gender-training modules on ICZM, iWRM and coastal livelihoods for technical members and new trainees will be developed, informed by consultations and workshops to engage these stakeholders. Collaborates with the KM expert to consolidate gender-relevant information, data and research generated through project activities. Provides guidance to the EPs of Child Project 2.1 for the execution of the Project's Gender Mainstreaming Action Plan Monitors the execution of the Project's Gender Mainstreaming Action Plan and provide corrective measure where needed it. Contributes to the design of gender balanced trainings, meetings, events and publications for Child Project 2.1. Develop gender assessments and analysis for Child Project 2.1 as relevant. 	Cross-cutting (all Child Project 2.1 workplan activities)
ustification for tra	els	The consultants may be required to travel to the countries and or premises of the executing partners to discuss execution of the activities and programmatic issues related to the implementation of International Waters' activities, Knowledge Management and Gender mainstreaming Strategies. Moreover, the consultants may be also required to participate and contribute to the MedProgramme Steering Committees, Annual Stocktaking Meetings and other meetings and events as relevant.	

Project No GEF ID 9687

Project Name Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection

Project Short Name CP 2.1 - MedProgramme

Pro rammatic A roach Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security (GEF ID 9607)

Im lementin A enc UN Environment

Executin A enc UN Environment Mediterranena Action Plan (MAP)

		UDGET C	OMPONENTS				UDGET	EAR		
UN En ironment Umoja S onsored classes O ject of the ud et	COMPONENT 1	COMPONENT 2	PRO ECT MANAGEMENT	Total	EAR 1	EAR 2	EAR	EAR	EAR	Total
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$
T 1 PRO ECT STAFF AND PERSONNEL			-							
1101 MedPCU - MedProgramme Coordinator (P4)	75,000	15,000	283,000	7	74,600	74,600	74,600	74,600	74,600	7
1120 MedPCU - Programme Financial Assistant (G5)	-	-	15,000	1	3,000	3,000	3,000	3,000	3,000	1
1121 MedPCU - Programme and Administration Assistant (G5)	-	-	15,000	1	3,000	3,000	3,000	3,000	3,000	1
1121 Regional consultant Internationl Waters	82,000	40,000	-	122	15,000	28,000	28,000	28,000	23,000	122
1201 Regional consultant Knowledge Management	25,000	45,000	-	7	14,000	14,000	14,000	14,000	14,000	7
1202 Regional consultant Gender Expert	25,000	35,000	-	6	10,000	12,000	14,000	14,000	10,000	6
Com onent Total	207,000	135,000	313,000	6	119,600	134,600	136,600	136,600	127,600	6
T 16 TRAVEL			-							
1601 Staff Travel & Transport (MedPCU)	14,000	12,000	20,000	6	9,200	9,200	9,200	9,200	9,200	6
1602 Travels to support IW:LEARN (part of the 1% allocation)	25,000	20,000	-		5,000	10,000	10,000	10,000	10,000	
1604 Travels to attend PSC and ASM (Stakeholeders from Countries)	60,000	75,000	-	1	20,000	23,000	23,000	23,000	46,000	1
Com onent Total	99,000	107,000	20,000	226	- 34,200	42,200	42,200	42,200	65,200	226
T 1 GRANT TO IP (See footnotes 1 2 and)										
2201 Coastal Aquifers (UNESCO) ⁽¹⁾	-	2,825,000	-	2 82	1,130,000	423,750	423,750	423,750	423,750	2 82
2202 ICZM Implementation (PAP/RAC) (2)	1,820,000	-	-	1 82	728,000	273,000	273,000	273,000	273,000	1 82
2203 Participatory Approach for ICZM Implementation (Plan Bleu) (3)	360,000	-	-	6	36,000	54,000	72,000	108,000	90,000	6
2204 IWRM Implementation (GWP Med) (4)	680,000	-	-	68	68,000	102,000	136,000	204,000	170,000	68
Com onent Total	2,860,000	2,825,000	-	68	1,962,000	852,750	904,750	1,008,750	956,750	68
T 12 OPERATING AND OT ER DIRECT COSTS							•	•		
3301 Meetings (PSC, ASM, etc.)	45,000	45,000	-	9	18,000	18,000	18,000	18,000	18,000	9
3302 Synergies with IW:LEARN (Meetings, Training, Experience Note, etc.) - part 1% allocation	15,000	10,000		2	-	5,000	6,000	7,000	7,000	2
4101 Office supplies, consumables, shipping, couriers, etc.	7,000	7,000	-	1	2000	3,000	3,000	3,000	3,000	1
4301 Miscellaneous	3,000	3,000	-	6	1,000	1,500	1,500	1,000	1,000	6
5101 Equipments and maintenance	5,000	5,000	-	1	2,000	2,000	2,000	2,000	2,000	1
5201 Products for the KM Strategy, Publication, Translation, Dissemination and reporting costs	70,000	70,000	-	1	28,000	28,000	28,000	28,000	28,000	1
5301 Communications (tel, fax, e-mail, etc)	4,500	4,500	-	9	1,800	1,800	1,800	1,800	1,800	9
5302 Mid-Term Evaluation	60,000			6	-	-	60,000	-	-	6
5303 Terminal Evaluation		80,000	-	8	-	-	-		80,000	8
Com onent Total	209,500	224,500	-		52,800	59,300	120,300	60,800	140,800	
TOTAL COSTS	7	291	-	7	2 168 6	1 88 8	12 8	128	1 29	7
								TOTALC		
									om onent 1	291
										291
								TC	TAL PMC	

TOTAL GEF Grant

Footnote 1 ud et Lines 22 1 ill e art of a Letter of A reement (LOA) et een UN En ironment MAP and UNESCO.

Footnote 2 ud et Lines 22 2 ill e art of a Project Coo eration A reement (PCA) et een UN En ironment MAP and PAP RAC.
Footnote ud et Lines 22 ill e art of a Project Coo eration A reement (PCA) et een UN En ironment MAP and Plan leu.

Footnote ud et Lines 22 ill e art of a Project Coo eration A reement (PCA) et een UN En ironment MAP and G P Med.

Project No GEF ID 9687

Project Name Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection

Project Short Name CP 2.1 - MedProgramme

Pro rammatic A roach Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security (GEF ID 9607)

Im lementin A enc UN Environment

Executin A enc UN Environment Mediterranena Action Plan (MAP)

	Co Financin er Com onent					Co Financin er ear					
Sources of Co financin Project Com onent	COMPONENT 1	COMPONENT 2	SUPPORT TO PRO ECT E ECUTION	Total	EAR 1	EAR 2	EAR	EAR	EAR	Total	
	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	
ash co financin					·		T				
GWP Med	960,000	-	-	96	-	240,000	240,000	240,000	240,000	96	
	960,000	-	-	96		240,000	240,000	240,000	240,000	96	
ind co financin	900,000	-	-	20	_	240,000	240,000	240,000	240,000	70	
Algeria	4,551,270	-	-	1 27	-	1,137,818	1,137,818	1,137,818	1,137,818	1	
Egypt	2,032,000	2,032,000	-	6	-	1,016,000	1,016,000	1,016,000	1,016,000	6	
Lebabon	57,000,000	-	723,600	7 72 6	-	14,430,900	14,430,900	14,430,900	14,430,900	7 72	
Libya	600,000	-	-	6	-	150,000	150,000	150,000	150,000	6	
Montenegro	3,300,000	2,300,000	500,000	6 1	-	1,525,000	1,525,000	1,525,000	1,525,000	61	
Morocco	18,000,000	-	-	18	-	4,500,000	4,500,000	4,500,000	4,500,000	18	
Tunisia	38,530,000	-	92,000	8 622	-	9,655,500	9,655,500	9,655,500	9,655,500	8 622	
UN Environment/MAP	-	-	158,852	1 8 8 2	-	39,713	39,713	39,713	39,713	1 8	
UNESCO	-	6,000,000	-	6	-	1,500,000	1,500,000	1,500,000	1,500,000	6	
PAP/RAC	5,509,509	-	-	9 9	-	1,377,377	1,377,377	1,377,377	1,377,377	9	
Plan Bleu	741,000	-	-	7 1	-	185,250	185,250	185,250	185,250	7 1	
GWP Med	240,000	-	-	2	-	60,000	60,000	60,000	60,000	2	
	-	-	-		-	-	-	-	-		
	130,503,779	10,332,000	1,474,452	1 2 1 2 1	-	35,577,558	35,577,558	35,577,558	35,577,558	1 2 1	
TOTAL COSTS	1 1 6 779	1 2	1 7 2	1 27 2 1		817 8	817 8	817 8	817 8	1 27	
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ANNEX G: MONITORING AND EVALUATION PLAN AND BUDGET CP2.1

M E acti it	Pur ose	Res onsi le	ud et	Time frame
			(US)	
Ince tion or sho and Annual Stoc ta in meetin s	Full 5-year workplans, budgets, procurement plans etc. will be confirmed. Inception report to be finalized as key project document.	EA MedPCU	20,000 for 1 Inception workshop and 80,000 for 4 Annual Stocktaking meetings (total 100,000)	Inception workshop within 8 months of project start. Annual Stocktaking meetings once a year starting from the 2 nd year of execution.
Project Steerin Committee	Annual review of project activities, outputs and intended outcomes; and detailed annual implementation and budget planning The first year's SC meeting is also the Inception Workshop where the	EA MedPCU	125,000 for 5 meetings	At least annually Additional component- specific coordination/ advisory meetings will also be held to support preparation of recommendations to PSC.
Tra el for roject monitorin	Monitoring and support to the technical activities under Components 1 and 2)	EA and regional consultants	Included in component budgets	1-4 missions per year, depending on needs e.g. to unlock bottlenecks or support partners
Midterm Re ie	Reviews progress and draws lessons on execution issues and impact of project activities to midterm. Proposes corrective actions as required.	IA- Consultant	60,000	At the midterm of the project
Terminal re ort	Reviews effectiveness against implementation plan Highlights technical outputs Identifies lessons learned and likely design approaches for future projects, assesses likelihood of achieving design outcomes	EA	Included in component budgets	At the end of project implementation
Inde endent Terminal e aluation	Reviews effectiveness, efficiency and timeliness of project implementation, coordination mechanisms and outputs	UNEP Evaluation Office	80,000	At end of project implementation

Total indicati e Mon	nitorin E aluation cost	6	
	benchmarks		
	and assesses against prevailing		
	Highlights technical achievements		
	remedial actions for future projects		
	Identifies lessons learned and likely		

ANNE PRO ECT IMPLEMENTATION ARRANGEMENTS

The institutional arrangements as described in the CEO Endorsement Request (section A.6) are further detailed in this annex, which provides information on the roles of the MedPCU and the Executing Partners.

MedPro ramme Coordinatin Unit (MedPCU)

The detailed list of services to be provided by the MedPCU are as follows:

Child Project 2.1 management services:

- Manage the flow of information from the field and produce periodic monitoring reports, namely quarterly financial expenditure reports; annual expenditure forecasts and procurement plans; half-yearly narrative reports of progress including the annual Project Implementation Review:
- Initiate, validate, sign and implement legal instruments with all bilateral partners including executing partners and countries where appropriate;
- Organize travel and payment of DSA for staff and consultants as needed;
- Coordinate and support the project activities of PAP/RAC, Plan Bleu and GWP Med (Component 1), and UNESCO IHP (Component 2);
- Organize the meetings of the Project Steering Committee (PSC) and serve as its Secretariat;
- Ensure the Project governance and oversight of the financial resources from the GEF investment and the co-financing delivered by the Project stakeholders.

Programmatic coordination:

- Ensure that the execution of the entire MedProgramme is aligned and integrated with the priorities of the Contracting Parties to the Barcelona Convention, its 2016-2021 Mid-Term Strategy and biennial Programmes of Work;
- Ensure that the execution of the MedProgramme Gender and Knowledge Management Strategies is consistent across the entire Programme.
- Establish a mechanism to monitor and evaluate progress towards the objectives of the MedProgramme as a whole.

MedProgramme Visibility:

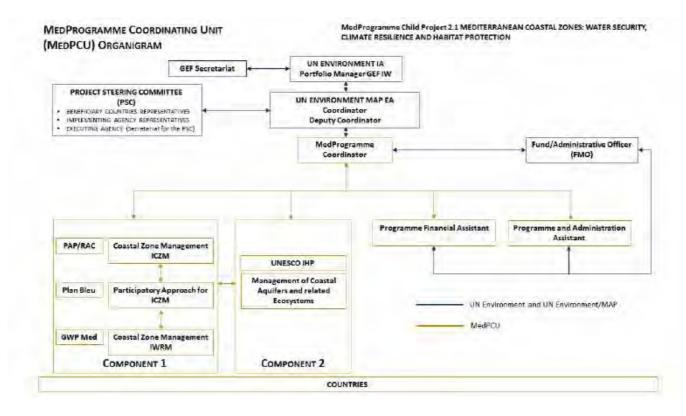
- Represent the MedProgramme in global events and initiatives.
- Ensure that the Programme Annual Stocktaking Meeting is organized in a coordinated manner to efficiently serve the countries, IA, EA and stakeholders;

• Share the Project achievements, products/outputs with the Project and MedProgramme's stakeholders;

Technical support:

- Provide staff time and expertise in guiding and advancing the execution of technical activities under the Project;
- Coordinate with administrative and technical staff on drafting and compiling tender documents as needed; advertise tenders where relevant; convene and/or contribute to tender review committees where appropriate;
- Coordinate with administrative and technical staffs on drafting and compiling tender documents as needed; advertise tenders where relevant; convene and/or contribute to tender review committees where appropriate

The proposed staffing arrangements for the MedPCU are provide in figure 1:



It is anticipated that the MedPCU will be staffed with the following core positions:

- MedProgramme Coordinator (P4)
- Programme Officer CW (P3)
- Programme Financial Assistant (G5)
- Programme and Administration Assistant (G5)

In addition to this, the MedPCU operations will be supported during specific periods of the lifespan of the Child Project 2.1, by one Gender Specialist, one Knowledge Management Specialist and by a regional expert on ICZM and IWRM, to be engaged through out-sourced contracts. The MedPCU will be established and hosted by UN Environment/MAP in Athens, Greece, following the successful model of the MedPartnership Project.

Executin Partners (EP) The EP will execute activities of the project that fall within their core areas of expertise. PAP/RAC, Plan Bleu and GWP will be executing the national and regional activities foreseen under Component 1 of the project. UNESCO-IHP will be the executing the national and regional activities foreseen under Components 2 of the project. The specific contribution and responsibilities of each of the EPs is described in the CEO Endorsement request and linked to specific actions, outcome and outputs. The EPs will report on the project implementation progress to the MedPCU, the EA and IA and will contribute to the PSC. The main roles of EPs are to:

- Provide technical advice and engage with the countries for all aspects of the execution of activities under the relevant Components of the Child Project 2.1;
- Provide staff time and expertise in guiding their respective project activities;
- Supervise experts hired to ensure on time, high-quality deliverables;
- Manage the flow of financial resources earmarked for the implementation of activities;
- Review technical and substantive inputs by partners and countries on workplans etc.;
- Support the MedPCU and provide inputs for the preparation of the CP2.1 workplans, budgets, reports and other documents as relevant;
- Review the technical quality of the Child Project 2.1 outputs in coordination with the MedPCU.

In addition, the EP will also liaise and meet periodically with the MedPCU to: 1) discuss emerging issues and challenges in order to prepare timely contingency plans and measures; 2) update the MedPCU and the other EP on the progress made in the execution of their respective activities; 3) to prepare the working and information documents for the PSC and key events of the Project and the MedProgramme; and 4) to ensure effective coordination during the execution of the activities.

ANNEX I - KEY DELIVERABLES AND BENCHMARKS

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s				
Com onent 1 Coastal one Mana ement							
	sustainability in beneficiary countries enha- coastal plans and instruments, and improv	anced through the expanded compliance with the ICZM P red gender equality.	rotocol and the adoption of				
Output 1.1 Multi- stakeholders' consultations on ICZM Protocol ratification and implementation.	1.1.1 Development of the materials for the consultations in support of ICZM Protocol ratification/implementation.	Updated materials to support stakeholder consultations for ratification and implementation of the ICZM Protocol.	Materials used to engage stakeholders for the development of ICZM instruments.				
	1.1.2 Support for the implementation / ratification of the ICZM Protocol.	 Seven reports (one each for Albania, Algeria, Egypt, Lebanon, Libya, Morocco and Tunisia) on the analysis of land use and land use change. Three reports (one each for Egypt, Lebanon and Morocco) on the estimated impacts of the ratification/implementation of the ICZM Protocol. Two reports (one each for Algeria and Tunisia) on the analysis of the legal and institutional frameworks in the relevant countries in the domains of relevance to the ICZM Protocol. 	 Land use analyses for the participating countries. Analyses of the legal and institutional frameworks in domains relevant to the ICZM Protocol. 				
	1.1.3 Five national consultations in support of ICZM Protocol ratification.	 Three national events (one each in Algeria, Egypt and Tunisia) in support of ICZM Protocol ratification. Five reports (one each for Algeria, Egypt, Lebanon, Morocco and Tunisia) documenting the results of the national consultations in support of ICZM Protocol ratification. 	Feedback from stakeholders participating in the national consultations.				
	1.1.4 Implementing three sub-regional trainings in support of ICZM Protocol implementation.	 One training module developed for the regional trainings. Three sub-regional trainings in support of ICZM Protocol implementation. Three reports documenting the results of each of the sub-regional trainings. 	 Training modules used for trainings in support of ICZM Protocol. implementation Feedback from participants of the regional trainings. 				

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
	1.1.5 Development of the conceptual framework for coastal observation.	8 sums s F s s s s	 Desk study on existing national capacities and gaps with respect to coastal observation and data management for each of the project countries. Reports from the regional workshops.
Output 1.2 Inter- Ministerial Coordination mechanisms for coastal management in place.	1.2.1 Establishment or enhancement of Inter-Ministerial Coordination (IMC) frameworks.	F- F	 Reports of preparatory meetings with the Ministries. Reports of the national meetings to present the proposal.
	1.2.2 Organizing national consultations to launch IMCs.	Two national consultations (one each in Lebanon and Tunisia) to launch the Inter-Ministerial Committees.	Reports of the national consultations.
Output 1.3 ICZM Strategies/plans developed and adopted.	1.3.1 Two national ICZM Strategies developed and submitted for adoption (Egypt and Lebanon).	Egypt and Lebanon).	 Desk studies of the relevant legal and institutional frameworks in the two countries. Reports of meetings organized with stakeholders.

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
	1.3.2 One ICZM Plan developed and submitted for adoption (Morocco).	One ICZM Plan for Morocco.	 Desk study on the baseline situation including legal and institutional frameworks, identification of coastal data. Stakeholder mapping report. Reports of meetings organized with stakeholders, Ministries, etc.
	1.3.3 Implementing the participatory methodology Climagine as a support to the development of the National ICZM Strategies and ICZM Plans.	Four sets of reports (one each for Egypt, Lebanon, Montenegro and Morocco) documenting the results of the stakeholder dialogues organized with Climagine to support the development of ICZM instruments in the four countries.	Preparatory materials for the meeting used to implement the Climagine methodology.
	1.3.4 One Integrated Management Plan (IMP) to be prepared in collaboration with all partners, according to the IMF methodology (Damour, Lebanon).	The Integrated Management Plan for the Damour area of Lebanon.	 Baseline report on the ICZM aspects of the Damour area. Baseline report on the Damour River basin. Baseline report on the coastal aquifers in the Damour area.

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
	1.3.5 One ICZM Plan developed a submitted for adoption (Ko Bay, Montenegro).		 Desk study on the baseline situation including legal and institutional frameworks, identification of coastal data. Stakeholder mapping report. Reports of meetings organized with stakeholders, etc.
Output 1.4 A series of training events in ICZM, MSP and CVC adaptation developed and implemented.	1.4.1 Preparation of train material for the MedOp online training course.		 Existing MedOpen Basic training modules (ICZM and CV&C). Feedback from participants enrolled in the new Basic training modules.
	1.4.2 Implementing advanced onl training courses and training events on a yearly basis.		 Existing MedOpen Advanced training modules (ICZM and CV&C). Feedback from the participants enrolled in the new Advanced training modules.
	1.4.3 Face-to-face training support MedOpen module land use and land use char analysis.		 Existing MedOpen training materials. Feedback from participants enrolled in face-to-face training workshop. Training certificates issued to participants.

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
Output 1.5 Raised awareness on the approaches promoted by the project (with attention to the engagement of private sector).	1.5.1 Producing materials for awareness raising campaigns.	Awareness raising materials for the three Coast Day Celebrations (photographs for exhibitions, press releases, short videos, posters, stickers, brochures, leaflets,).	Materials developed for previous Coast Day campaigns.
	1.5.2 Implementing three awareness raising campaigns with the central themes of Coastal Resilience, Coastal Aquifers and Women in Coastal Management	Three awareness raising campaigns (one each on Coastal Resilience, Coastal Aquifers and Women in Coastal Management).	 Concept notes on the development of the campaigns. Reports of meeting with national host country representatives.
	1.5.3 Participation in dissemination and awareness raising activities at the regional and global levels.	 Dissemination of methodologies for ICZM Strategies and Plans design and implementation, using the examples of Albania, Algeria and Morocco. Participation in IW:LEARN activities include the International Waters Conferences. Scientific articles published in relevant journals and presented at conferences. 	Documentation on ICZM available on IW:LEARN website and MedProgramme website (including appropriate elements of the awareness raising campaigns, National ICZM Strategies,).

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s					
Com onent 2 Mana ement of Coastal Aquifers and Related Ecos stems								
	Outcome 2: Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of							
Output 2.1: Detailed assessments of the current state of priority coastal aquifers and related coastal ecosystems, vulnerability maps and recommendations for land use planning addressing relevant stakeholders, including private sector, national and local water associations and	assessment of priority coastal aquifers and related ecosystems through the bility adations g methodology. Assessment Reports (one each for the five priority aquifers). Assessment Reports (one each for the five priority aquifers). Reports on stakeholder consultations that feed into the assessment reports.							
water users.	2.1.2 Comprehensive vulnerability assessment and associated management recommendations.	Five technical reports (one for each of the five priority aquifers) on the results of the application of the ACVM methodology, including the comprehensive vulnerability assessment, management recommendations and vulnerability maps.	Vulnerability maps for the five priority aquifers.					
Output 2.2: National Dialogues identifying potential conjunctive management solutions, including stakeholders' training modules designed and implemented.	2.2.1 Stakeholder analysis carried at national level.	Five reports (one for each of the five priority aquifers) on the approach and the results of the stakeholder analysis.	 Results of stakeholder mapping exercises. One communication strategy to define how to engage with and disseminate information to the different stakeholder groups. 					

Com onent Outcome Out uts	nt Outcome Acti ities Deli era les		enchmar s
	2.2.2 Training modules design and implementation.	Three training modules on conjunctive management (one for each of the three sub-regions: Adriatic, Southern and Eastern Mediterranean).	 One capacity building strategy to guide the development of training modules on conjunctive management. Reports of the training workshops delivered. Feedback from the training workshop participants.
	2.2.3 National Dialogues identifying potential conjunctive management solutions.	 Five National Dialogues (one in each of the five priority aquifers) to identify potential conjunctive management solutions. Reports of the outcomes of the National Dialogues, including recommendations. 	Materials to facilitate dialogues at the National Dialogues.
Output 2.3: National Assessments of Submarine Groundwater Discharges and of Marine – Freshwater Interactions.	2.3.1 Creation of an SGD international expert advisory group.	 Creation of the advisory group on SGD. One report on recommendations on the appropriate state of the art techniques to identify the location and extent of submarine groundwater discharge zones and to quantify their discharges. One regional workshop on SGD. 	Stakeholder mapping to identify appropriate organizations for the advisory group.
	2.3.2 Identification of SGD preferential zones at national level.	One technical report on the identification of SGD preferential zones focusing on the five priority aquifers, including methodology used, location and extent of zones.	Satellite imagery to feed into the analysis of SGD preferential zones.

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
	2.3.3 Quantification of fluxes and contaminant loads at selected areas (Priority aquifers).	 One technical report on the quantification of fluxes and contaminant loads in the proximities of the five priority aquifers. Five National Assessments of Submarine Groundwater Discharges and of Marine – Freshwater Interactions (one for each of the priority aquifers), consolidating the results of the analysis of the SGD preferential zones and the quantification of fluxes and contaminant loads. 	 Report on the most suitable quantification methods and locations to produce estimates of SGD fluxes and contaminant loads. Appropriate hydrogeological models to upscale measurements, and validate conceptual models. Steering Committee reports indicating validation of the National Assessments.
	2.3.4 Sensitization of coastal communities and stakeholders	1 national meeting per country with coastal communities and stakeholders	Report of the meetings and related documents and information material
Output 2.4: Priority aquifers coastal management plans produced including design and field testing of aquifer monitoring multi-purpose networks and protocols.	2.4.1 Identify the characteristics of the system which will determine how it can best be managed.		Definition of the Conceptual Models of the five priority aquifers.
	2.4.2 Protecting groundwater quality.	• Five technical reports (one for each of the five priority aquifers) including maps on Comprehensive Aquifer Vulnerability to pollution and saline intrusion, and recommendations on compatible land use practices and activities (Land use Capability Maps).	Maps published and submitted for adoption by responsible entities.

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
	2.4.3 Reaching consensus on aquifer services.	 Five meetings (one for each of the five priority aquifers) to bring together key stakeholders to reach consensus on which aquifer services should be prioritized. Five meeting reports (one for each of the five priority aquifers) for presentation to relevant public agency mandated to manage groundwater. 	 Materials to support the participatory process to identify priority aquifer services. Feedback from the stakeholders participating in the meetings.
	2.4.4 Preparation of the Coastal Aquifer Management Plans.	Five Coastal Aquifer Management Plans (one for each of the five priority aquifers).	 "Foundation Statement" issued at the inception of the planning process to document the commitment of the responsible authorities and key stakeholders. Reports of the meetings/consultations with stakeholders to develop the management plans.
	2.4.5 Coastal Aquifer Management Plan submission for approval and adoption by relevant national authorities.		Evidence of submission of management plans to local/national governance entities.
	2.4.6 Aquifer monitoring multi- purpose networks and protocols designed and field tested, and responsible personnel trained, in the five priority aquifers.	Five monitoring program design requirements reports (one for each of the five priority aquifers).	Consensus reached at national level on objectives, host organization, parameters and indicators, coverage and sustainability plan.
	2.4.7 GIS-Based Information Management System.	Information Management System for all data required for the implementation of the Aquifer Management Plans.	Definition of information sharing protocols at national and regional levels.

Com onent Outcome Out uts	Acti ities	Deli era les	enchmar s
	2.4.8 Implementation Pilot Tests.	Five pilot programs (one in each of the five priority aquifers) to test implementation of the aquifer monitoring multipurpose networks.	Reports on pilot networks performance.
Output 2.5: Facilitation of broader adoption of approaches promoted by the project with attention on long term sustainability and engagement of private sector, national and local water associations and water users.	2.5.1 Promoting coastal groundwater governance.	 Publication in the national languages of the main documents produced (Management Plan, Aquifer Assessment and others); organization of dissemination events involving stakeholders and the national scientific community. Proactive participation to the activities and stocktaking events organized in the framework of the CP 4.1, dealing with knowledge management across all MedProgramme child projects. Participation in IW LEARN activities and events, including IWCs; scientific papers presented and published in major journals /conferences. 	Publication and dissemination of the Priority Aquifers Management Plans.
	2.5.2 Fostering knowledge on Mediterranean submarine groundwater discharges.	Strategy for promoting the results of the inventory of SGDs and of the modern technologies used to locate them and assess their flows and possible pollution loads.	Mediterranean Conference on SGDs presenting the results of Output 2.4 to the broader scientific community and regional stakeholders.

ANNE OFP ENDORSEMENT LETTER MEDPROGRAMME

Adress: Rr. Norbert Jokl, Tirana, Albania, www.moe.gov.al

June 23, 2016

To: Ms. Brennan Van Dyke, Executive Coordinator United Nation Environment Programme Gigiri, P.O. Box 30552-00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Program (Med Programme)

In my capacity as GEF Operational Focal Point for Albania, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nation Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc).

The total financing¹ being requested for the child projects under this Program is US\$ 47,390,000 inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US\$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund Agency Focal Area			Amour			it (in US\$)	
	Programmin g of Funds	GEF Project Financing	Expected PPG	Agency Fee	Total		
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500

[&]quot;Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

HET IS A FP Pinkes oned Tempore Assume April 2015

GEFTF	UNEP	Biodiversity (Lybia)	1,376,147		123,853	1,500,000
Total Fir	ancing		42,376,147	1,200,000	3,813,853	47,390,000

Sincerely,

Mr. Pellumb Abeshi

General Director of Environment, GEF OFP, Albania

Copy to: Convention Focal Point for Stockholm (PoPs)

Convention Focal Point for Minamata

الجمهورية الجزائرية الديمقراطية الشعبية الجمهورية PEOPLE's DEMOCRATIC REPUBLIC OF ALGERIA وزارة البيئة والطاقات المتجددة

Ministry of Environment and Renewable Energies

REF: 09/0FP-GEF-ALG/MEER/2017

Algiers, November, 16th 2017

To: Ms.Kelly West, Executive Coordinator United Nation Environment Programme Gigiri, P.O. Box 30552-00100 Nairobi, Kenya.

Subject: Endorsement for Mediterranean Sea Program (Med Programme).

In my capacity as GEF Operational Focal Point for ALGERIA, I confirm that the above Program proposal is in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nation Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partner (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc).

The total financing' being requested for the child projects under this Program is US\$ 47,390,000 inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown reque ted for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US\$ 1,500,000 of Biodiversity STAR earmarked by Libya.

-2015s		gency Focal Area	Programming Funds	Amount (in US\$)				
Trust Fund	Agency			GEF Project Financing	Expected PPG	Agency Fee	Total	
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000	
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000	
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500	
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500	
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000	
Total Fi	nancing			42,376,147	1,200,000	3,813,853	47,390,000	

Sincerely,
Mr Karim BABA
GEF Operational Focal Point

Copy to: General Secretariat (Ministry of Environment and Renewable Energies).

GEF Political Focal Point (Ministry of Foreign Affairs).

Stockholm (POPs) Convention Focal Point.

BOSNAIHERCEGOVINA MINISTARSTVO VANJSKE TRGOVINE I EKONOMSKIH ODNOSA



БОСНА И ХЕРЦЕГОВИНА МИНИСТАРСТВО СПОЉНЕ ТРГОВИНЕ И ЕКОНОМСКИХ ОДНОСА

BOSNIA AND HERZEGOVINA MINISTRY OF FOREIGN TRADE AND ECONOMIC RELATIONS

No: 06-3-50-1976- 3/16 Sarajevo, 22 july 2016

To: Ms- Brenan Van Dyke, Executive coordinator United Nations Environment Programme Gigiri, P.O Box 30552 – 00100 Nairobi, Kenya

Subject: Endorsement for Mediteraanean Sea Programme (MedProgramme)

In my capacity as GEF Political Focal Point for Bosnia and Herzegovina, I confirm that the above Program proposal is in accordance with my government's national priorities and our commitment to the relevant global environmental conventions.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The MedProgramme follows the successful implementation of the "MedPartnership" and "ClimVar & ICZM" GEF funded projects in Bosnia and Herzegovina. Among other successful activities, the development of a PCB inventory and disposal of PCB in Bosnia and Herzegovina, has been one of the most relevant achievements of the above mentioned projects during the period 2009 and 2015.

The total financing being requested for the child projects under this Program is US\$ 47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program.

Kindly note that by endorsing the MedProgramme Bosnia and Herzegovina is not committing cofinancing to the Programme at this stage.

Sincerely,

MINISTER Mirko Šarović

MEdez

Copy to: Convention Focal Point for Stockholm (POPs)

"Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

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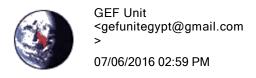
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- To Shelley.Farrington@unepmap.gr, hoda.elturk@unepmap.gr, Lorenzo.Galbiati@unepmap.gr,
- cc "ceo.eeaa@eeaa.cloud.gov.eg" <ceo.eeaa@eeaa.cloud.gov.eg>

bcc

Subject MedProgramme

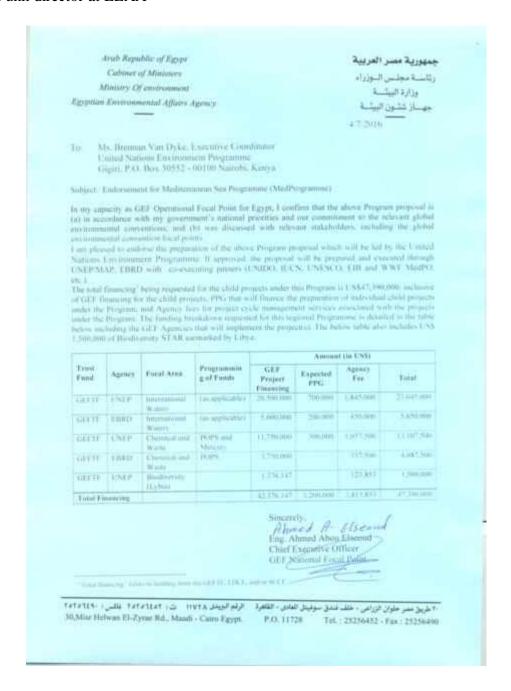
Dear All,

Hope this email find you well, As agreed with Eng. Abou Elseoud, kindly find below the signed endorsement letter for the MedProgramme.

Best regards

Hoda

Gef unit director at EEAA



GEF Unit / Egypt Mobile: +2- 0122- 3352319 Fax: +2- 02 -25256454

Pl. Consider the Environment before printing this email

Beirut, 11-07-2016 Our Ref: 3513/B

THE MINISTER

Ms. Brennan Van Dyke Executive Coordinator United Nations Environment Programme Gigiri, P.O. Box 30552 - 00100 Nairobi, Kenya

Dear Ms. Van Dyke,

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Lebanon, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD and co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The total financing being requested for the child projects under this Program is US\$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US\$ 1,500,000 of Biodiversity STAR earmarked by Libya.

			Programming of Funds	Amount (in US\$)				
Trust Fund	Agency	Focal Area		GEF Project Financing	Expected PPG	Agency Fee	Total	
GEFTF	UNEP	International Waters	(as applicable)	20,500,00	700,000	1,845,000	23,045,000	
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000	
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,00	300,000	1,057,500	13,107,500	
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500	
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000	
Total Financing				42.376,14 7	1,200,000	3,813,853	47,390,000	

Sincerely yours

Mohamad Al Mashaouk Minister of Environment

Cc: - Registrer

Convention Focal Point for Stockholm (POPs),

- Convention Focal Point for Minamata

A-E16-V 1-1/

libyan interim government

Government of Libya
Environmental General Authority



الحكومة الليبية المؤقتة رئاسة مجلس الوزراء الهيئة العامة للبيئة

الرقم الإشارى:

التاريخ 106.261 28.00 ما التاريخ

To: Ms. Brennan Van Dyke, Executive Coordinator United Nations Environment Programme Gigiri, P.O. Box 30552 - 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Libya, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing patners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The total financing¹ being requested for the child projects under this Program is US\$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s).

The below table also includes US\$ 1,500,000 of Biodiversity STAR earmarked by Libya.

				Amount (in USS)				
Trust Fund	Agency	Focal Area	Programmin g of Funds	GEF Project Financing	Expected PPG	Agency Fee	5,650,000 13,107,500 4,087,500	
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000	
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000	
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500	
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500	
GEFTF	UNEP	Biodiversity (Libya)		1,376,147		123,853	1,500,000	
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000	

I consent to the utilization of Libya's allocations in GEF-6 as defined in the System for Transparent Allocation of Resources (STAR). For projects outside the STAR, I am endorsing funding from the focal area envelopes.

Sincerely,

Dr. Mustafa Soliman Operational and Political Focal

Copy to:

Convention Focal Point for Stockholm (POPs) Convention Focal Point for Minamata

1 "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

0

egalibya2015@gmail.com

العنوان / شحات - ليبيا



MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM



Podgorica, June 27th 2016

Ref/No: 11-66/33

To: Ms. Brennan Van Dyke, Executive Coordinator

United Nations Environment Programme Gigiri, P.O. Box 30552-00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Montenegro, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc).

The total financing¹ being requested for the child projects under this Program is US\$ 47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US\$ 1,500,000 of Biodiversity STAR earmarked by Libya.

[&]quot;Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.



MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM



May Montenagro live forever

			Area Programming of Funds	Amount (in US\$)				
Trust Fund	Agency	Focal Area		GEF Project Financing	Expected PPG	Agency Fee	Total	
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000	
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000	
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GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500	
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000	
Total Financing			42,376,147	1,200,000	3,813,853	47,390,000		

Sincerely,

Ms. Marija Vukcevic Operational Focal Point

Director General for EU Integration and International Cooperation Ministry of Sustainable Development and Tourism

Copy to:

Convention Focal Point for Stockholm (POPs)

Convention Focal Point for Minamata

الملكة الغربية +«XMAS+ I MEYOSO Royaume du Maroc



Ministère délégué auprès du Ministre de l'Energie, des Mines, de l'Eau et de l'Environnement, chargé de l'Environnement

DPCC

Z 4 JUIN 2016

الوزارة المنتدب لدى وزيس الطاقة والمعادن والماء والبيشة، المكلفة بالبيشة +د المدهد م المدهد المكلفة بالبيشة +د المدهد م المدهد المدهد المدادة المدادة المدادة المدادة المدادة المدادة المدادة المدادة المدادة

To: Ms Brennan Van Duke, Executive Coordinator, United Nations Environment Programme Gigiri,P.O.Box 30552-00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Morocco, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing patners (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc.)

The total financing from the GEFTF, LDCF, and/or SCCF being requested for the child projects under this Program is US\$ 47 390 000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US\$ 1,500,000 of Biodiversity STAR earmarked by Libya.

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Trust Fund	Agency			GEF Project Financing	Expected PPG	Agency Fee	Total	
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GEFTF	EBRD	International Waters	(as applicable)	5 000 000	200 000	450 000	5 650 000	
GEFTF	UNEP	Chemical and Waste	POPs and Mercury	11 750 000	300 000	1 057 500	13 107 500	
GEFTF	EBRD	Chemical and Waste	POPS	3 750 000		337 500	4 087 500	
GEFTF	UNEP	Biodiversity (Lybia)		1 376 147		123 853	1 500 000	
Total Financing				42 376 147	1 200 000	3 813 853	47 390 000	

Sincerely,

GEF Operational Focal Point

Le Directeur du Partenanal de la Communication et de Cooberatio

Bhamed REMAHIA

Copy to: Convention Focal point for Stockholm (POPs)
Convention Focal point for Minamata

REPUBLIC OF TUNISIA

MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT



Tunis, 27/06/2016

To: Ms. Brennan Van Dyke, Executive Coordinator United Nations Environment Programme Gigiri, P.O. Box 30522 – 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Tunisia, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

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Trust Fund			Programmin g of Funds	Amount (in USS)				
	Agency	Focal Area		GEF Project Financing	Expected PPG	Agency Fee	Total	
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GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000	
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GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500	
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000	
Total Financing			1	42,376,147	1,200,000	3,813,853	47,390,000	

Sincerely, Sabyia Bnouni

GEF Operational Focal Point

Copy to: Convention Focal Poin for Stockholm (POPs)
Convention Focal Point for Minamata

[&]quot;Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

ANNE 1 CO FINANCING COMMITMENT LETTERS FROM PRO ECT PARTNERS CP2.1



Mediterranean Action Plan Coordinating Unit Barcelona Convention Secretariat



Date: 12 October 2018

Subject: In-kind contribution to the GEF ID 9687 project "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection." - Child Project 2.1 of the MedProgramme.

In my capacity as Coordinator of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan (UN Environment/MAP), I wish to confirm that UN Environment/MAP will coordinate the execution of the child project of the MedProgramme "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection" which will contribute to the implementation of ICZM and to the conjunctive management of the coastal areas, surface and groundwater in a number of freshwater basins in the Mediterranean LME.

I am hereby pleased to confirm that UN Environment/MAP will support the project with an in-kind contribution of 158,852 USD which will be allocated over the 60 months of the project duration starting from its approval by the GEF Secretariat. The in-kind contribution will be allocated as follows:

- 153,852 USD: Staff time in support of the project (Management of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan, Administration/Fund Management Officer, Human Resources Officer and Administrative Staff);
- 5,000 USD: In-kind contribution for Sundry and communication costs.

Yours sincerely

Gaetano Leone Coordinator

P O Box 30552-00100

GEF Coordination Office United Nations Environment Programme (UNEP) United Nations Avenue



United Nations Educational, Scientific and Cultural Organization

> Organisation des Nations Unies pour l'éducation, la science et la culture

Organización de las Naciones Unidas para la Educación, la Ciencia y la Gultura

Организация Объединенных Наций по вопросам образования, науки и культуры

منظمة الأمم المتحدة للتربية والعلم والثقافة

> 联合国教育。· 科学及文化组织 .



Mr. Gaetano Leone UNEP/MAP Coordinator United Nations Environment Programme Mediterranean Action Plan 48 Vas. Konstantinou, 11635 Athens Greece

Paris, 5 July 2018

Ref.: SC/HYD/18/232

Subject: Co-financing contribution of UNESCO to the UNEP/GEF MedProgramme Child Project 2.1 – Project outcome 5 "Protection of coastal aquifers and groundwater ecosystems"

Dear Mr. Leone,

Following the endorsement of the Programme Framework Document (PFD) for the UNEP/GEF project "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security", including its Child Project 2.1 on "Climate Resilience, Water Security and Habitat Protection in Mediterranean Coastal Areas" which Outcome 5 on the "Protection of coastal aquifers and groundwater ecosystems" is executed by UNESCO, I am pleased to confirm the commitment of UNESCO to provide co-financing for the Outcome 5. This co-financing contribution will amount USD 6,000,000.00 (6 million).

The co-financing participation to the project will be in kind and will include parallel activities that UNESCO Headquarters (International Hydrological Programme [IHP] and Intergovernmental Oceanographic Commission [IOC]), UNESCO Field Offices, UNESCO Centres and Chairs, and UNESCO partners will implement in the participating countries all along the duration of the project. They will contribute to the better protection of coastal aquifers and groundwater ecosystems in the Mediterranean region and to the achievement of the project objectives.

I look forward to a continued fruitful cooperation within the framework of the MedProgramme project and remain at your disposal to provide you any additional information you may require.

I kindly ask you to forward this letter to the competent GEF Officer.

Yours sincerely,

Alice Aureli
Chief of the Section on Groundwater Systems
and Human Settlements
Division of Water Sciences, UNESCO

7 Place Fontenoy 75007 Paris, France Tél.: +33 (0)1 45 68 41 78 Fax: +33 (0)1 45 68 58 11



United Nations Environment Programme Mediterranean Action Plan Priority Actions Programme Regional Activity Centre

Kraj sv. Ivana 11, 21000 Split, Croatia Phone + 385 21 340470, fax+385 21 340490 e-mail: paprac@paprac.org www.pap-thecoastcentre.org

Split, July 27, 2018

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Subject: Co-financing contribution from PAP/RAC for MedProgramme Child Project 2.1 Mediterranean Coastal Zones: Climate Resilience, Water Security and Habitat Protection

Dear Ms Ishii,

I wish to confirm PAP/RAC's interest in and support to the MedProgramme Child Project 2.1 "Mediterranean Coastal Zones: Climate Resilience, Water Security and Habitat Protection". We look forward to our collaboration with the GEF in the context of this project which will substantially contribute to the implementation of the ICZM Protocol for the Mediterranean. Although the project will be implemented in 9 countries of the Mediterranean basin, its results will be disseminated all over the Mediterranean and the opportunities will be sought to secure visibility and use of the results in all of the basin.

I am pleased to inform you that PAP/RAC will support the Project activities with an in-kind contribution of 5,509,509 USD, that will be allocated during the Project duration in the following way:

- ICZM related activities in the Mediterranean, based on the 2018-2019 Mediterranean Action Plan Programme of Work and estimation of the Programme of Work for 2020-2024: 3,625,110 USD (Mediterranean Trust Fund [MTF])
- Programme, administrative and finance staff time: 159,510 USD (MTF)
- Activities related to the bilateral cooperation agreement of PAP/RAC with the Italian Ministry for the Environment, Land and Sea: 431,948 USD (IMELS)
- Activities related to different EU, MAVA and UN Environment funded projects: 1,233,941 USD
- Value of the meeting venues: 59,000 USD

With kindest regards, I remain

Yours sincerely,

Željka Škaričić, PAP/RAC Director







Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Ref.: 1779/18/ELC/SD Marseille, 27/07/2018

Followed by: Antoine LAFITTE

Subject: Co-financing contribution from Plan Bleu for Child Projects 2.1 and 4.1 of the MedProgramme

Dear Ms. Ishii,

I wish to reiterate Plan Bleu's interest in and support to the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). The Plan Bleu is committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, especially those of Child Projects 2.1 and 4.1.

Co-financing for Child Project 2.1

Child Project 2.1 is devoted to increasing climate resilience and water security in coastal zones while also promoting the protection of coastal habitats. As a co-executing agency of this Child Project, the Plan Bleu will undertake activities designed primarily to support the ICZM Protocol implementation. More specifically, the Plan Bleu will develop a conceptual methodological framework for coastal observatories and support the preparation of two ICZM plans and two national ICZM strategies through its implementation of the Climagine approach for stakeholder engagement.

To inform and reinforce the activities foreseen in Child Project 2.1, the Plan Bleu will bring an important set of data and knowledge generated from several complementary initiatives it has recently completed, including the following:

- FP7 PEGASO project (EU funding)
- FP7 CLIMRUN project (EU funding)
- INTERREG MED-IAMER project (EU funding)

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 741,000, which represents the Plan Bleu's in-kind co-financing to Child Project 2.1.

Co-financing for Child Project 4.1

The Plan Bleu recognizes that awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, the Plan Bleu also pledges staff time and institutional support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication.

The value of all related complementary activities, staff time and institutional support is estimated at USD 50,000, which represents the Plan Bleu's in-kind co-financing to Child Project 4.1.

Yours sincerely,

Elen Lemaitre-Curri

Director



Global Water Partnership Mediterranean

c/o MIO-ECSDE Kyrristou 12, 10556 Athens T: 210-3247490, -3247267, F: 210-3317127

E-mail: secretariat@gwpmed.org, Web: www.gwpmed.org

Mr. Gaetano Leone Coordinator United National Environment Programme Barcelona Convention Secretariat Coordinating Unit for the Mediterranean Action Plan Vassileos Konstantinou 38 Athens 11635 Greece

Athens, 10 September 2018

Subject: Co-financing for the GEF MedProgramme Child Project 2.1 'Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection'

Dear Mr. Leone

I wish to reiterate GWP-Med's interest in and support to the GEF MedProgramme including its Child Project 2.1 'Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection', which will contribute to the Barcelona Convention objectives.

I'm please to inform you that GWP-Med will support the Project activities, over its implementation time, with an in cash or kind contribution of 1,200,000 USD with resources from GWP-Med related lines of action and core funding, through alignment and integration of their activities with the Project's activities. The co-financing figure may roughly represent 80% (960,000 USD) in cash and 20% (240,000 USD) in kind.

Looking forward to our close collaboration for the success of the Project

Yours Sincerely

Vangelis Constantianos Executive Secretary



Mediterranean Action Plan Coordinating Unit Barcelona Convention Secretariat



Date: 12 October 2018

Subject: In-kind contribution to the GEF ID 9687 project "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection." - Child Project 2.1 of the MedProgramme.

In my capacity as Coordinator of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan (UN Environment/MAP), I wish to confirm that UN Environment/MAP will coordinate the execution of the child project of the MedProgramme "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection" which will contribute to the implementation of ICZM and to the conjunctive management of the coastal areas, surface and groundwater in a number of freshwater basins in the Mediterranean LME.

I am hereby pleased to confirm that UN Environment/MAP will support the project with an in-kind contribution of 158,852 USD which will be allocated over the 60 months of the project duration starting from its approval by the GEF Secretariat. The in-kind contribution will be allocated as follows:

- 153,852 USD: Staff time in support of the project (Management of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan, Administration/Fund Management Officer, Human Resources Officer and Administrative Staff);
- 5,000 USD: In-kind contribution for Sundry and communication costs.

Yours sincerely

Gaetano Leone Coordinator

GEF Coordination Office
United Nations Environment Programme (UNEP)

United Nations Environment Progra United Nations Avenue P O Box 30552-00100



United Nations Educational, Scientific and Cultural Organization

> Organisation des Nations Unies pour l'éducation, la science et la culture

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> 联合国教育。· 科学及文化组织 .



Mr. Gaetano Leone UNEP/MAP Coordinator United Nations Environment Programme Mediterranean Action Plan 48 Vas. Konstantinou, 11635 Athens Greece

Paris, 5 July 2018

Ref.: SC/HYD/18/232

Subject: Co-financing contribution of UNESCO to the UNEP/GEF MedProgramme Child Project 2.1 – Project outcome 5 "Protection of coastal aquifers and groundwater ecosystems"

Dear Mr. Leone,

Following the endorsement of the Programme Framework Document (PFD) for the UNEP/GEF project "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security", including its Child Project 2.1 on "Climate Resilience, Water Security and Habitat Protection in Mediterranean Coastal Areas" which Outcome 5 on the "Protection of coastal aquifers and groundwater ecosystems" is executed by UNESCO, I am pleased to confirm the commitment of UNESCO to provide co-financing for the Outcome 5. This co-financing contribution will amount USD 6,000,000.00 (6 million).

The co-financing participation to the project will be in kind and will include parallel activities that UNESCO Headquarters (International Hydrological Programme [IHP] and Intergovernmental Oceanographic Commission [IOC]), UNESCO Field Offices, UNESCO Centres and Chairs, and UNESCO partners will implement in the participating countries all along the duration of the project. They will contribute to the better protection of coastal aquifers and groundwater ecosystems in the Mediterranean region and to the achievement of the project objectives.

I look forward to a continued fruitful cooperation within the framework of the MedProgramme project and remain at your disposal to provide you any additional information you may require.

I kindly ask you to forward this letter to the competent GEF Officer.

Yours sincerely,

Alice Aureli
Chief of the Section on Groundwater Systems
and Human Settlements
Division of Water Sciences, UNESCO

7 Place Fontenoy 75007 Paris, France Tél.: +33 (0)1 45 68 41 78 Fax: +33 (0)1 45 68 58 11



United Nations Environment Programme Mediterranean Action Plan Priority Actions Programme Regional Activity Centre

Kraj sv. Ivana 11, 21000 Split, Croatia Phone + 385 21 340470, fax+385 21 340490 e-mail: paprac@paprac.org www.pap-thecoastcentre.org

Split, July 27, 2018

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Subject: Co-financing contribution from PAP/RAC for MedProgramme Child Project 2.1 Mediterranean Coastal Zones: Climate Resilience, Water Security and Habitat Protection

Dear Ms Ishii,

I wish to confirm PAP/RAC's interest in and support to the MedProgramme Child Project 2.1 "Mediterranean Coastal Zones: Climate Resilience, Water Security and Habitat Protection". We look forward to our collaboration with the GEF in the context of this project which will substantially contribute to the implementation of the ICZM Protocol for the Mediterranean. Although the project will be implemented in 9 countries of the Mediterranean basin, its results will be disseminated all over the Mediterranean and the opportunities will be sought to secure visibility and use of the results in all of the basin.

I am pleased to inform you that PAP/RAC will support the Project activities with an in-kind contribution of 5,509,509 USD, that will be allocated during the Project duration in the following way:

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- Activities related to different EU, MAVA and UN Environment funded projects: 1,233,941 USD
- Value of the meeting venues: 59,000 USD

With kindest regards, I remain

Yours sincerely,

Željka Škaričić, PAP/RAC Director







Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Ref.: 1779/18/ELC/SD Marseille, 27/07/2018

Followed by: Antoine LAFITTE

Subject: Co-financing contribution from Plan Bleu for Child Projects 2.1 and 4.1 of the MedProgramme

Dear Ms. Ishii,

I wish to reiterate Plan Bleu's interest in and support to the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). The Plan Bleu is committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, especially those of Child Projects 2.1 and 4.1.

Co-financing for Child Project 2.1

Child Project 2.1 is devoted to increasing climate resilience and water security in coastal zones while also promoting the protection of coastal habitats. As a co-executing agency of this Child Project, the Plan Bleu will undertake activities designed primarily to support the ICZM Protocol implementation. More specifically, the Plan Bleu will develop a conceptual methodological framework for coastal observatories and support the preparation of two ICZM plans and two national ICZM strategies through its implementation of the Climagine approach for stakeholder engagement.

To inform and reinforce the activities foreseen in Child Project 2.1, the Plan Bleu will bring an important set of data and knowledge generated from several complementary initiatives it has recently completed, including the following:

- FP7 PEGASO project (EU funding)
- FP7 CLIMRUN project (EU funding)
- INTERREG MED-IAMER project (EU funding)

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 741,000, which represents the Plan Bleu's in-kind co-financing to Child Project 2.1.

Co-financing for Child Project 4.1

The Plan Bleu recognizes that awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, the Plan Bleu also pledges staff time and institutional support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication.

The value of all related complementary activities, staff time and institutional support is estimated at USD 50,000, which represents the Plan Bleu's in-kind co-financing to Child Project 4.1.

Yours sincerely,

Elen Lemaitre-Curri

Director



Global Water Partnership Mediterranean

c/o MIO-ECSDE Kyrristou 12, 10556 Athens T: 210-3247490, -3247267, F: 210-3317127

E-mail: secretariat@gwpmed.org, Web: www.gwpmed.org

Mr. Gaetano Leone Coordinator United National Environment Programme Barcelona Convention Secretariat Coordinating Unit for the Mediterranean Action Plan Vassileos Konstantinou 38 Athens 11635 Greece

Athens, 10 September 2018

Subject: Co-financing for the GEF MedProgramme Child Project 2.1 'Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection'

Dear Mr. Leone

I wish to reiterate GWP-Med's interest in and support to the GEF MedProgramme including its Child Project 2.1 'Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection', which will contribute to the Barcelona Convention objectives.

I'm please to inform you that GWP-Med will support the Project activities, over its implementation time, with an in cash or kind contribution of 1,200,000 USD with resources from GWP-Med related lines of action and core funding, through alignment and integration of their activities with the Project's activities. The co-financing figure may roughly represent 80% (960,000 USD) in cash and 20% (240,000 USD) in kind.

Looking forward to our close collaboration for the success of the Project

Yours Sincerely

Vangelis Constantianos Executive Secretary

ANNE 2 CO FINANCING COMMITMENT LETTERS FROM COUNTRIES CP2.1

الجمهورية الجزائرية الديمقراطية الشعبية PEOPLE'S DEMOCRATIC REPUBLIC ALGERIA وزارة البيئسة والطاقات المتجددة

Ministry Of The Environment And Renewable Energies

Nº 26/IEE/2018

2 9 JUIL 2018

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Subject: Co-financing contribution from Algeria for Child Projects 2.1 and 4.1 of the MedProgramme.

Dear Ms. Ishii,

The Ministry of Environment and New Energy, looks forward to the forthcoming collaboration between Algeria and the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We are committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Algeria in support of Child Projects 2.1 and 4.1. In keeping with the GEF's policy on co-financing, Algeria has identified a number of national initiatives that will support the implementation of these Child Projects and that will contribute to the achievement of their objectives.

Child Project 2.1 is devoted to increasing climate resilience and water security in coastal zones while also promoting the protection of coastal habitats. The activities foreseen in Algeria in this framework include a national assessment and stakeholder consultation to support ratification of the Protocol for Integrated Coastal Zone Management. These activities will build upon and benefit from an important set of national initiatives that Algeria is currently financing to promote the sustainable management of coastal zones, to identify climate change adaptation strategies in the coastal zone, and to protect sensitive coastal habitats, amongst others. These initiativesinclude the following:

- Update of the National Strategy for Integrated Coastal Zone Management;
- Planning studies for the preparation of local coastal plans for several wilayas(Bejaia, Chlef, Ain Témouchent, Tipasa, El Tarf, Oran, ...);
- Assessments of the vulnerability of coastal zones to environmental risks in two wilayas (El Tarf and Alger);

- Preparation of climate change adaptations plans for three wilayas (Nord, HautsPlateaux and Sud);
- Studies on the protection and management of coastal areas in several wilayas (Alger, El Marsa, Mostaganem.

The value of all related complementary initiatives is estimated at USD 4,551,270, which represents the in-kind co-financing contribution of Algeria to Child Project 2.1.

The government of Algeriaalso recognizes that awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, it also pledges its support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication. Algeriais currently preparing a rich set of pedagogical tools and awareness raising campaigns to promote the protection of the coastal areas. These activities will contribute to raising awareness about the issues of concern affecting the Mediterranean Sea, and in many cases could be used to promote the knowledge tools and the results of all Child Projects of the MedProgramme. The value of these complementary activities is estimated at USD 2,160,542 USD, which represents the in-kind co-financing contribution of Algeria to Child Project 4.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely.

Samira HAMIDI

GEF FOCAL POINT

Arab Republic of Egypt Cabinet of Ministers Ministry of Environment Egyptian Environmental Affairs Agency

جمهورية مصر العربية رئاسة مجلس الوزراء وزارة البينسة جهاز شئون البيلة

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environmental Facility (GEF)

Subject: Co-finance contribution from Egypt to Child Projects 1.2, 2.1 and 4.1 of the MedProgramme

Dear Ms. Ishli,

Within the framework of the mutual and fruitful cooperation between the Global Environment Facility (GEF), UN Environment MAP and the Egyptian Environmental Affairs Agency (EEAA), I would like to seize this opportunity to convey my appreciation for your continuous cooperation and support to EEAA through the forthcoming Mediterranean Sea Program (MedProgramme): Enhancing Environmental Security.

I would like to inform you that EEAA is committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the multi-focal area MedProgramme, through activities that will be undertaken in Egypt in support of Child Projects 1.2, 2.1 &4.1. In line with the GEF's co-financing policy, EEAA has identified a number of national programs and initiatives to support the achievement of the goals and objectives of these Child Projects.

On the other hand, we are in process of preparing the co-finance letter for the remaining child projects.

Co-financing for Child Project 1.2

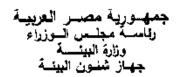
EEAA will support the implementation of Child Project 1.2 and its objectives to reduce land-based pollution in priority coastal hotspots and to measure progress to impacts, through planning and development of institutional capacity and monitoring, pollution reduction, environmental inspection, awareness raising. In addition to, implementation of sustainable development policies, capacity building and dedicated staff time and institutional support, as appropriate, for the execution and monitoring of the project activities.

The estimated in-kind contribution, related to the national programmes, staff time and institutional support is USD 4,187,000.

Co-financing for Child Project 2.1

Child Project 2.1 is fully consistent with and supportive to the implementation of the national policy framework of the Barcelona Convention, with regard to the Strategic Action Programmes to enhance climate resilience and water security in coastal zones. In addition to promoting activities for the protection of coastal habitats, regional plans on management of coastal aquifers and related ecosystems, Programme-wide communication and knowledge management.

Arab Republic of Egypt Cabinet of Ministers Ministry of Environment Egyptian Environmental Affairs Agency



These activities will build upon and benefit from several national programmes undertaken by the Egyptian government, including establishment of a National Integrated Coastal Zone Management (ICZM) multipurpose monitoring network for groundwater, seawater and other climate parameters with relevant measurable indicators, as well as engagement of all relevant stakeholders in the implementation of a National ICZM Strategy and national plans in Egypt. In addition to enhancing the ICZM awareness, issues affecting coastal communities and the environment.

The estimated in-kind contribution, related to the national programmes, staff time and institutional support is USD 4,064,000.

Co-financing for Child Project 4.1

EEAA recognizes that awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, EEAA also pledges staff time and institutional support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication

The estimated in-kind contribution, related to the national programmes, staff time and institutional support is USD 2,000,000.

We look to working with GEF for the good of the Mediterranean Sea and the achievement of our shared global environmental goals.

Yours sincerely,

Mohamed Shehab Abdelwahab

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GEF Operational Focal Point

Chief Executive Officer

Ahin AhoRaid



Beirut, 02-08-2018 Our Ref: 4387 B

Mr. Gaetano Leone United Nations Environment Programme Mediterranean Action Plan Coordinator 48. Vassileos Konstantinou Ave., 11635 Athens

P O Box: 18019, Greece Tel.: +30 210 7273100 Fax: +30 210 7253196

Dear Mr. Leone,

<u>Subject:</u> Lebanon's co-financing contributions for "MedProgramme Child project components 1.2, 2.1 and 4.1"

The Ministry of Environment reiterates its full endorsement to the MedProgramme Child project and mainly components 1.2, 2.1 and 4.1, which are still under preparation by UNEF, in full coordination with the Ministry of Environment and national stakeholders, and to be financed by GEF.

Within this context, we are sending you copies of Annel 1 (three table templates) related to the co-financing of the MedProgramme Child Projects 1.2, 2.1 and 4.1 for your kind consideration.

Looking forward to the approval and successful implementation of MedProgramme Child Project.

Sincerely Yours,

Tarek Al Khatib Minister of Environment

GEF Operational Pocal Poin

Enclosed:

- Annex v Co-Financing for Child Project 1.2, 2.1 and 4.1

Cc:

- Ministry of Environment Registry Department of Public Relation and External Affairs
- Ministry of Environment Service of Natural Resources Department of Natural Resources Protection
- Ministry of Environment Service of Urban Environment Department of Urban Environmental Protection

Annex 1 Details on co-financing for the MedProgramme

A. Child Project 1.2 "Mediterranean pollution hot spots investment project"

Grant co-financing

1. Grant (cash) co-financing

	Description of proposed contributing activity	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.	Cleaning of Litani River that End In the Mediterranean Sea	Lebanese Government Law 63/2016	2017 - 2023	204 M
			Total:	204 M

In-kind co-financing

2. In-kind co-financing (projects, initiatives, or programs)

	Name of project, initiative, or program	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.	Lebanon Environmental Pollution Abatement Project	Italian Agency for Development Cooperation	2014 – 2020	2.3 M
2.	Improve Capacity for Environmental Compliance Project	Institutional Development Fund - World Bank	2013 - 2016	300,000
4.	Al Ghadir Industrial Waste water assessment	EIB - Mediterranean Hotspots Investment Programme (MeHSIP)	2017-2018	100,000
5.	Strengthening Lebanese Water and Agriculture Sector Programme	Dutch Emabaasy	2017-2018	250,000
			Total:	3.1 M



3. In-kind co-financing (staff time and institutional support)

	Type of support	Description	Estimated yearly co-	Estimated total co-
		·	financing	financing
			contribution (USD)	contribution (2019
				- 2024) (USD)
1.	Staff time	Two employees working part	80,000	480,000
		time on the project for 600hours		
		/year at 67\$/hr		
			Total:	480,000



Annex 1 Details on co-financing for the MedProgramme

A- Child Project 2.1 "Mediterranean coastal zones: climate resilience, water security and habitat protection"

Grant co-financing

1. Grant (cash) co-financing

	Description of proposed contributing activity	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.	Cleaning of Litani River that End In the Mediterranean Sea and the construction of waste water networks and waste water treatment plants all along the southern coast of Lebanon	Lebanese Government Law 63/2016	2017 - 2023	204 M
			Total:	204 M

In-kind co-financing

2. In-kind co-financing (projects, initiatives, or programs)

	Name of project, initiative, or program	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.	Dumpsite Rehabilitationon on the coast of the City of Saida	National government	2012 - 2016	25,000,000
2.	EMRL (Environmental Ressources Monitoring in Lebanon)	Greece	2011-2013	1,640,000
			Total:	26,640,000

3. In-kind co-financing (staff time and institutional support)

	Type of support	Description	Estimated yearly co- financing contribution (USD)	Estimated total co- financing contribution (for the duration of the project 72 months) (USD)
1.	₹.	Three employee working part time on the project for 600 hours /year at 67\$/hr	120,600	723,600
			Total:	723,600



- B- Child Project 4.1 "Mediterranean Sea Basin environment and climate regional support project"
- 1. In-kind co-financing (staff time and institutional support)

	Type of support	Description	Estimated yearly co-	Estimated total co-
			financing	financing
			contribution (USD)	contribution (2019
				- 2024) (USD)
1.	Staff time	2 Employee working part time on the project (200 hours per	26800	160,800
		year at 67 USD/hr)		
			Total:	160,800





دولة ليبيا رئاسة مجلس الوزراء الهيئة العامية للبيئة



التاريخ: / / 143 الموافق: 1 (3/4/ \$2016

الرقم الإشاري :

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Subject: Co-financing contribution from Libya for Child Projects 2.1 and 4.1 of the MedProgramme

Dear Ms. Ishii,

The Ministry of Water Resources and the Environmental General Authority look forward to the forthcoming collaboration among Libya, the GEF and UN Environment/MAP in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We are committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Libya in support of Child Projects 2.1 and 4.1. In keeping with the GEF's policy on co-financing, Libya has identified a number of national initiatives that will support the execution of these Child Projects and that will contribute to the achievement of their objectives.

Co-financing for Child Project 2.1

Child Project 2.1 is devoted to increasing climate resilience and water security in coastal zones while also promoting the protection of coastal habitats. The activities foreseen in Libya in this framework include a national assessment of submarine groundwater discharges. Experts from Libya will also participate in the regional activities of this Child Project, including capacity building workshops on integrated coastal zone management and on the conjunctive management of groundwater and surface water. These activities will build upon and benefit from an important set of related national initiatives in Libya, including the following:

- Update of the National Strategy for Integrated Coastal Zone Management
- Planning studies for the preparation of local coastal plans
- Assessments of the vulnerability of coastal zones to environmental risks
- Preparation of climate change adaptations plans
- Studies on the protection and management of coastal areas

The value of all related complementary initiatives is estimated at USD 600,000, which represents the inkind co-financing contribution of Libya to Child Project 2.1.





دولة ليبيا رئاسة مجلس الوزراء الهيئة العامة للبيئة



المتاريخ ، / / 143 الموافيق : ا ﴿ / 2015 الرقم الإشاري ،

Co-financing for Child Project 4.1

The government of Libya also recognizes that awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, it also pledges its support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication. The Ministry of Water Resources and the Environmental General Authority will seek opportunities to promote the results of the MedProgramme through their networks and to raise awareness about the issues of concern affecting the Mediterranean Sea. The corresponding value of these efforts is estimated at USD 500,000 USD, which represents the in-kind co-financing contribution of Libya to Child Project 4.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

GEF Operational Focal Point for Libya



MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM

Reference number: 114-477/7

Podgorica, 27 July 2018

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

Subject: Co-financing commitment from Montenegro for Child Project 2.1: "Mediterranean coastal zones: water security, climate resilience and habitat protection" and Child Project 4.1 "Mediterranean Sea Basin environment and climate regional support project" of the MedProgramme

Dear Ms Ishii.

The Ministry of Sustainable Development and Tourism (MSDT) is responsible for coordinating Montenegro's strategic actions related to environmental policy, climate change, integrated coastal zone management and sustainable development in general. The MSDT has benefitted from the technical and financial assistance of the GEF in all of these domains and looks forward to our forthcoming collaboration with the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We are committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Montenegro in support of Child Projects 2.1 and 4.1. In keeping with the GEF's policy on co-financing, the government of Montenegro has identified a number of national initiatives that will support the implementation of these Child Projects and that will contribute to the achievement of their objectives.

Co-financing for Child Project 2.1

Child Project 2.1 is devoted to increasing climate resilience and water security in coastal zones while also promoting the protection of coastal habitats. The activities foreseen in Montenegro in this framework include the development of an integrated coastal zone management plan (ICZM Plan) in synergy with the SCCF project "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas" (GEF ID 9670), where climate change adaptation will be mainstreamed into local coastal planning processes for the Boka Kotorska Bay area. Support will be also provided for the Management of Coastal Aquifers and Related Ecosystems through the preparation of the Plan for the Buna - Bojana Transboundary Coastal Aquifer and National Assessment of Submarine Groundwater Discharges, in line with the Integrated Resources Management Plan (IRMP) for the Buna/Bojana area. These activities will build upon

upon and benefit from several national initiatives undertaken by the government of Montenegro. These include activities related to the treatment and disposal of wastewater for the coastal area of Boka Kotorska Bay and municipality of Ulcinj, infrastructural works on regulation of the Bojana river, and projects that are laying the foundations for implementation of all water-related directives of the EU, for example through provision of an operational and efficient monitoring network for surface water and groundwater and the preparation of River Basin Management Plans for the Adriatic and Danube Basins. In addition, the government of Montenegro will pledge staff time and institutional support to ensure the successful execution of the activities of this Child Project that will be carried out in Montenegro.

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 6,100,000, which represents the in-kind co-financing contribution of Montenegro to Child Project 2.1.

Co-financing for Child Project 4.1

The government of Montenegro also recognizes that knowledge sharing and management, awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. The Ministry of Sustainable Development and Tourism will seek opportunities to share information and data related to its coastal environment, to promote the results of the MedProgramme through its communication networks and to raise awareness about the issues of concern affecting the Mediterranean Sea. For this reason, the government of Montenegro also pledges staff time and institutional support for the Child Project 4.1. The value of the corresponding staff time and institutional support is estimated at USD 300,000 which represents the in-kind co-financing contribution of Montenegro to Child Project 4.1.

We look forward to continuing our fruitful collaboration with the GEF.

Yours sincerely,

Igor Gradjevic

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GEF Operational Focal Point

المملكة المغربية ROYAUME DU MAROC

Secrétariat d'Etat auprès du Ministre de l'Energie, des Mines, et du Développement Durable, chargé du Développement Durable

DPCC VIGGALAR



كتابة الدولة لدى وزير الطاقة والمعادن والتنمية المستدامة، المكلفة بالتنمية المستدامة

م ش رت رت

To Madame Naoko Ishii CEO & Chairperson of Global Environment Facility

1 8 JUIL 2018

<u>Subject:</u> Co-financing commitment from the Kingdom of Morocco for Child Projects 2.1 and 4.1 of the Mediterranean Sea Programme: Enhancing Environmental Security" (GEF ID 9607)

Dear Ms Ishii.

The State Secretary in charge of Sustainable Development looks forward to the forthcoming collaboration between the Kingdom of Morocco and the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security". We are committed to working with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Morocco in support of Child Projects 2.1 and 4.1.

In this regards, Morocco has identified a number of national initiatives that will support the implementation of these Child Projects and that will contribute to the achievement of their objectives.

Child Project 2.1 is devoted to increasing climate resilience and water security while also promoting the protection of coastal habitats. The activities foreseen in Morocco in this framework include the development of an integrated coastal zone management plan for the region of Tanger-Tétouan-Al Hoceima and a comprehensive set of actions to promote the sustainable management of the Rhiss Nekkor coastal aquifer, amongst others.

These activities will build upon and benefit from the robust portfolio of initiatives that the Kingdom of Morocco is currently financing to reduce pollution and to promote the sustainable development of the coastal zone, including through improved wastewater collection and treatment, better solid waste management, strategic coastal planning, and the monitoring of bathing waters. These initiatives include the following: The National Program of Liquid Sanitation, the National Household Waste Program, the Master Plan to Promote the Maritime Public Domain, the National Coastal Plan, The Monitoring Program for Bathing Waters.

The value of these initiatives is estimated at USD 176,909,600, which represents the in-kind co-financing contribution of the Kingdom of Morocco to Child Project 2.1.

The Kingdom of Morocco also recognizes that knowledge sharing, effective communication and awareness raising are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, it also pledges its support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication.

Morocco will seek opportunities to share information and data related to its coastal environment, to promote the results of the MedProgramme through its communication networks and to raise awareness about the issues of concern affecting the Mediterranean Sea. The value of these complementary activities is estimated at USD 500,000, which represents the in-kind co-financing contribution of Morocco to Child Project 4.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

The GEF Operational Focal Point

Directeur du Percenariet, de la Communication et de la Coopération

Rachid PIRADI

ووالتيل والمحاصر والطاع 16 مني للرياسي الرواط

REPUBLIC OF TUNISIA

MINISTRY OF LOCAL AFFAIRS
AND ENVIRONMENT

8454

Tunis:.....

Ms. Naoko Ishii Chief Executive Officer and Chairperson Global Environment Facility (GEF)

2 0 STPT 2018

Subject: Co-financing contribution from Tunisia for Child Projects 1.2, 2.1 and 4.1 of the MedProgramme.

Dear Ms. Ishii,

The Ministry of Local Affairs and Environment looks forward to Tunisia's forthcoming collaboration with the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). The government of Tunisia is committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Tunisia in support of Child Projects 1.2, 2.1 and 4.1. In keeping with the GEF's policy on co-financing, the government of Tunisia has identified a number of national initiatives that will support the implementation of these Child Projects and that will contribute to the achievement of their objectives.

Co-financing for Child Project 1.2

Child Project 1.2 will mobilize major innovative investments to support countries in efforts to reduce land-based sources (LBS) of pollution through implementation of their National Action Plans (NAPs), developed in accordance with the LBS Protocol of the Barcelona Convention and the corresponding Strategic Action Programmes (SAP-MED). In Tunisia, these investments will enable the rehabilitation of wastewater treatment facilities, the depollution of land areas, and the reduction of mercury releases. The government of Tunisia is carrying out several projects that will reinforce these activities, including through the preparation of a national chemicals database, the development of a monitoring network of contaminated sites, and the elimination of PCB-containing equipment, amongst other actions. Furthermore, the government of Tunisia will dedicate staff time as well as institutional support for this Child Project.

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 1,684,400, which represents the in-kind co-financing contribution (1,228,000 USD for related initiatives and 456,400 USD for staff time and institutional support) of the government of Tunisia to Child Project 1.2.

Co-financing for Child Project 2.1

Child Project 2.1 is devoted to increasing climate resilience and water security in coastal zones while also promoting the protection of coastal habitats. The activities foreseen in Tunisia in this framework include a national assessment and stakeholder consultation to support ratification of the Protocol for Integrated Coastal Zone Management, and a comprehensive set of actions to enhance the management of the Ras Jebel coastal aquifer and its related ecosystems. These activities will build upon and benefit from several national initiatives undertaken by the government of Tunisia, including collaborations on integrated water resources management at the local level, and the National Strategy on the Green Economy. In addition, the government of Tunisia will pledge staff time and institutional support to ensure the successful execution of this Child Project.

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 38,622,000, which represents the in-kind co-financing contribution (38,530,000 USD for related initiatives and 92,000 USD for staff time and institutional support) of Tunisia to Child Project 2.1.

Co-financing for Child Project 4.1

The government of Tunisia also recognizes that awareness raising and effective communication are key to the success of all Child Projects and the MedProgramme as a whole. For this reason, the government of Tunisia also pledges staff time and institutional support for the Child Project 4.1 and its Programme-wide strategies for knowledge management and communication. The value of the corresponding staff time and institutional support is estimated at USD 164,000, which represents the in-kind co-financing contribution of Tunisia to Child Project 4.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

Ministre des Affaires Locales
et de VEnvirongement
Rigidh MOUAKHAR

Annex 1 Details on co-financing for the MedProgramme

A. Child Project 1.2 "Mediterranean pollution hot spots investment project"

Grant co-financing

1. Grant (cash) co-financing

Note: The provision of grant (cash) co-financing is welcome but is not required for the submission of the Child Projects to the GEF for approval.

	Description of proposed contributing activity	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.				(002)

In-kind co-financing

2. In-kind co-financing (projects, initiatives, or programs)

Note: These may include ongoing projects or those that have been recently completed (within three years), national/regional strategies, etc.

	Name of project, initiative, or program	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.	Project post 2020 environmental protection strategy	National government (DGEQV)	2018-2019	100,000
2.	Project to implement national chemicals database	National government (ANCSEP)	2018-2019	100,000
3.	Development of contaminated sites monitoring network	National government (ANPE)	2018-2019	50,000
4.	National communication plan on chemicals and waste management	SAICM QSP	2018-2019	20,000
	Project of elimination of equipment containing or contaminated by PCB and their replacement by equipments complying with standards and rehabilitation and decontamination of the site (In the framework of the lake of Bizerte Integrated depollution)	BEI	2019-2022	958,000
			Total:	1,228,000

3. In-kind co-financing (staff time and institutional support)

Note: The contribution of staff from the government and national institutions is calculated on the basis of an estimated yearly time commitment and hourly compensation (For example, 50 hours per year at 100 USD per hour, for a total yearly contribution of 5,000 USD, or 25,000 USD over five years).

	Type of support	Description	Estimated yearly co- financing contribution (USD)	Estimated total co- financing contribution (2019 – 2024) (USD)
L	Staff time	Focal point project (ministry of Local Affairs and the Environment) (200 hours per year at 10 USD/hr)	2,000	12,000
2.	Staff time	Director of industrial pollution control (200 hours per year at 10 USD/hr)	2,000	12,000
3.	Staff time	MedProgramme C&W Focal Point (300 hours per year at 10 USD/hr)	2,400	14,400
4.	Staff time	Technical assistant	1.000	6,000
5.	Staff time	Administration assistant	1,000	6,000
6.	Staff time	Stockholm convention on POP Focal Point (50 hours per year at 10 USD/hr)	500	3,000
7.	Staff time	Minamata convention on mercury Focal Point (50 hours per year at 10USD/hr)	500	3,000
8.	Institutional support	Meeting space for national steering committee		10,000
9.	Institutional support	Access to national database on contaminated sites, inventories of POP, hazardous waste, mercury,		350,000
10.	Institutional support	Telecommunication (data, voice)/printing		40,000
	7.6		Total:	456,400

B. Child Project 2.1 "Mediterranean coastal zones; climate resilience, water security and habitual protection"

Grant co-financing

1. Grant (cash) co-financing

Note: The provision of grant (cash) co-financing is welcome but is not required for the submission of the Child Projects to the GEF for approval.

Description of proposed contributing activity	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
		Total:	

In-kind co-financing

2. In-kind co-financing (projects, initiatives, or programs)

Note: These may include ongoing projects or those that have been recently completed (within three years), national/regional strategies, etc.

	Name of project, initiative, or program	Funding source	Implementation period	Estimated total co-financing contribution (2019 – 2024) (USD)
1.	Support to Integrated Water Resources Management (AGIRE)	GIZ	2016-2019	5 800,000
2.	National strategy on green economy	Government	2018-2019	100,000
3.	National program for the coastal protection against erosion	Government (APAL)		600,000
4.	Coastal observatory	Government (APAL)		30,000
6.	Tunisian coastal protection program	KFW	2013-2024	32,000,000
			Total:	38,530,000

3. In-kind co-financing (staff time and institutional support)

Note: The contribution of staff from the government and national institutions is calculated on the basis of an estimated yearly time commitment and hourly compensation (For example, 50 hours per year at 100 USD per hour, for a total yearly contribution of 5,000 USD, or 25,000 USD over five years).

1.	Type of support Staff time	Description	Estimated yearly co- financing contribution (USD)	Estimated total co- financing contribution (2019 – 2024) (USD)
		Focal point component (Coastal Protection and Planning Agency) (300 hours per year at 10 USD/hr)	3,000	18,000
2.	Staff time	RAC/PAP Focal Point (Coastal Protection and Planning Agency) (100 hours per year at 10 USD/hr)	1,000	6,000
3.	Staff time	Director of coastal planning and rehabilitation program (Coastal Protection and Planning Agency)(200 hours per year at 10 USD/hour)	2,000	12,000
4.	Staff time	Technical assistant (Coastal Protection and Planning Agency) (50 hours per year at 10 USD/hr)	500	3,000
5.	Staff time	Administration assistant (Coastal Protection and Planning Agency) (50 hours per year at 10 USD/hr)	500	3,000
5.	Institutional support	Meeting space for national steering committee		10,000
7.	Institutional support	Telecommunication (data, voice)/printing		40,000
_			Total:	92,000

C. Child Project 4.1 "Mediterranean Sea Bashı vuvironment and climate regional support project"

Grant co-financing

4. Grant (cash) co-financing

Note: The provision of grant (cash) co-financing is welcome but is not required for the submission of the Child Projects to the GEF for approval.

1	Description of proposed contributing activity	Funding source	period	Estimated total co- financing contribution (2019 – 2024) (USD)
,,,			Total:	(20)

In-kind co-financing

5. In-kind co-financing (projects, initiatives, or programs)

Note: These may include ongoing projects or those that have been recently completed (within three years), national/regional strategies, etc.

1	Name of project, initiative, or program	Funding source	Implementation period	Estimated total co- financing contribution (2019 – 2024) (USD)
4.			2017-2022	3,1000
			Total:	

6. In-kind co-financing (staff time and institutional support)

Note: The contribution of staff from the government and national institutions is calculated on the basis of an estimated yearly time commitment and hourly compensation (For example, 50 hours per year at 100 USD per hour, for a total yearly contribution of 5,000 USD, or 25,000 USD over five years).

	Type of support	Description	Estimated yearly co- financing contribution (USD)	Estimated total co- financing contribution (2019 – 2024) (USD)
1.	Staff time	Focal point project (ministry of Local Affairs and the Environment) (200 hours per year at 10 USD/hr)	2,000	12,000
2.	Staff time	Director of industrial pollution control (100 hours per year at 10 USD/hr)	1,000	6,000
3.	Staff time	Director of Ecology and natural	1,000	6,000

-			Total:	164,000
10.	Institutional support	Telecommunication (data, voice)/printing		100,000
9.	Institutional support	Meeting space for national steering committee		10,000
8.	Staff time	GWP-Med and UNESCO-IHP Focal Point (100 hours per year at 10 USD/hr)	1,000	6,000
7.	Staff time	MedProgramme C&W Focal Point (100 hours per year at 10 USD/hr)	1,000	6,000
6.	Staff time	Communication an awareness assistant	1,000	6,000
5.	Staff time	Administration assistant	1,000	6,000
4.	Staff time	Technical assistant	1,000	6,000
		environments (100 hours per year at 10 USD/hr)		

ANNE M ACRON MS AND A REVIATIONS

ABH Watershed agencies (Agence de Bassins Hydrauliques)

AR5 Fifth Assessment Report BiH Bosnia and Herzegovina

CAMP Coastal Area Management Programme

CBO Community-Based Organization
CO2 eq Carbon Dioxide Equivalent
CSO Civil Society Organization

CVC Climatic Variability and Change FAO Food and Agriculture Organization

GDP Gross Domestic Product
GEF Global Environment Facility
GIS Geographic Information System

GRID Global Resource Information Database
GWP Med Global Water Partnership - Mediterranean

IA Implementing Agency

ICZM Integrated Coastal Zone Management
IHP International Hydrological Programme

IMAP Integrated Monitoring and Assessment Programme

IMC Inter-Ministerial Coordination (IMC)

IMP Integrated Management Plan

IPCC Intergovernmental Panel on Climate Change IRMP Integrated Resources Management Plan

ISO International Organization for Standardization

IW International Waters

IWRM Integrated Water Resources Management

IW:LEARN International Waters Learning and Resource Exchange Network

LBS Land Based Sources
LME Large Marine Ecosystem
MAP Mediterranean Action Plan

MEA Multilateral Environmental Agreement
Med PCU MedProgramme Coordinating Unit

MEHSIP The Mediterranean Hot Spots Investment Programme (MEHSIP)
MED POL The Marine Pollution Assessment and Control Component of MAP

MSP Maritime Spatial Planning NAP National Action Plan

NEA National Environmental Agency NGO Non-Governmental Organization

NWP National Water Plan

PAP/RAC Priority Actions Programme - Regional Action Center

PCB Polychlorinated Biphenyl

Plan Bleu Plan Bleu Regional Activity Centre

POPs Persistent Organic Pollutant

RCP Representative Concentration Pathway

SAP-BIO Strategic Action Programme for the Conservation of Biological Diversity in the

Mediterranean

SAP-MED Strategic Action Programme to address Pollution from Land-Based Activities

SCCF Special Climate Change Fund

SCCF Project Enhancing regional climate change adaptation in the Mediterranean Marine and

Coastal Areas

SDG Sustainable Development Goal SGD Submarine Groundwater Discharge

SLR Sea Level Rise

SMART Specific, Measurable, Achievable, Relevant, Time-Bound

TA Technical Assistance

TDA Transboundary Diagnostic Assessment

TDA-MED Transboundary Diagnostic Analysis for the Mediterranean

TWAP Transboundary Waters Assessment Programme

UfM Union for the Mediterranean

UNDAF United Nations Development Assistance Framework

UNDP United National Development Programme
UN Environment United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

WFD Water Framework Directive
WFEE Water-Food-Energy-Ecosystem

Annex N Project Implementation Timetable

			E	AR I	E	AR 2	E	AR	Б	AR	E.	AR
Com onent	Outcome	Out ut	S1	S2	S1	S2	S 1	S2	S1	S2	S1	S2
Com onent	Outcome 1:	Output 1.1: Multi-										
1 Coastal	Coastal zone	stakeholders'										
one	sustainability	consultations on										
Mana ement	in	ICZM Protocol										
	beneficiary	ratification and										
	countries	implementation.										
	enhanced	Output 1.2: Inter-										
	through the	Ministerial										
	expanded	Coordination										
	compliance	mechanisms for										
	with the	coastal										
	ICZM	management in										
	Protocol and	place.										
	the adoption	Output 1.3: ICZM										
	of national	Strategies/plans										
	ICZM .	developed and										
	strategies,	adopted.										
	coastal plans	Output 1.4: A										
	and instruments,	series of training										
	and	events in ICZM,										
	improved	MSP and CVC										
	gender	adaptation developed and										
	equality.	implemented.										
	equality.	Output 1.5 Raised										
		awareness on the										
		approaches										
		promoted by the										
		project (with										
		attention to the										
		engagement of										
		private sector).										
Com onent	Outcome 2:	Output 2.1:										
2	Increased	Output 2.1:										
Mana ement	resilience to	Detailed										
of coastal	climatic	assessments of the										
aquifers and	variability	current state of										
related	and change,	priority coastal										
ecos stems	and	aquifers and										
	enhanced	related coastal										
	water security of	ecosystems,										
	coastal	vulnerability maps and										
	populations	recommendations										
	through	for land use										
	improved	planning										
	sustainability	addressing										
	of services	relevant										
	provided by	stakeholders,										
	provided by	sunctionalis,										

			E	AR	E	AR 2	E	AR	E	AR	E	AR
Com onent	Outcome	Out ut	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
	coastal	including private										
	aquifers and	sector, national										
	by	and local water										
	groundwater-	associations and										
	related	water users.										
	coastal	Output 2.2:										
	habitats.	National										
		Dialogues										
		identifying										
		potential										
		conjunctive										
		management										
		solutions,										
		including										
		stakeholders'										
		training modules										
		designed and										
		implemented.										
		Output 2.3:										
		National										
		Assessments of										
		Submarine										
		Groundwater										
		Discharges and of										
		Marine –										
		Freshwater										
		Interactions.										
		Output 2.4:										
		Priority aquifers										
		coastal										
		management plans										
		produced										
		including design										
		and field testing of aquifer monitoring										
		multi-purpose										
		networks and										
		protocols.										
		Output 2.5:										
		Facilitation of										
		broader adoption										
		of approaches										
		promoted by the										
		project with										
		attention on long										
		term sustainability										
		and engagement										
		of private sector,										
		national and local										
		water associations										
		and water users.										

ANNEX O: GENDER ASSESSMENT AND GENDER ACTION PLAN CP2.1

1. Introduction

This Gender Assessment is prepared as an input to the GEF (Global Environment Facility)-funded project titled "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection", also referred to as the Child Project 2.1 of the MedProgramme. With regional components and national activities in tandem, this project spans across nine countries: Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. This project is being envisioned under the aegis of the Mediterranean Sea Programme, a comprehensive response to the environmental and social challenges faced in the region.

For the broader context of the Child Project 2.1, it is important to understand the vision, breadth and capacity of the MedProgramme. The MedProgramme is the third step of 20 years of cooperation between UN Environment/MAP and GEF in the Mediterranean Region. It builds both on the successful implementation of previous GEF projects and on the legal framework provided by the Barcelona Convention and its protocols. The Programme comprises a series of interconnected projects (Child Projects) based on an overarching vision for change: "A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse, contributing to sustainable development for the benefit of present and future generations". Through the joining of forces of three GEF focal areas and of numerous partners including UN agencies, development banks, MAP Regional Activity Centres, NGOs and others, under the leadership of UN Environment/MAP, the MedProgramme is expected to achieve large-scale impacts in improving livelihood and health of coastal populations, water security, and sustainability of marine and coastal ecosystem services. The Programme will strategically contribute to the sustainable development efforts and gender equality in the Mediterranean basin as well as to the dialogue, cooperation, and therefore peace and security in the region.

Gender relations in the Mediterranean region are a kaleidoscope¹ of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities. The European Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pressures on natural resources and coastal and marine ecosystems, and climate risks.

For the northern Mediterranean countries (in Europe), labour market dynamics exhibit a significant gender gap: women's employment rates (especially for marginalized communities such as the Romas) are lower, along with an existing gender wage gap. Since economic capital is among the important determinants of coping capacities to external shocks (in this case, water stress, degradation of coastal aquifers, loss of coastal livelihoods, climate impacts among others), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable. The 'double disadvantage' of the situation should also be reckoned with: due to lack of viable economic capital, vulnerable groups are often excluded from socio-political control over coastal zone and water resources (coastal aquifers,

See this report by the Union for the Mediterranean (UfM) regarding an action plan towards investing in gender equality in the region.

particularly) management policies – increasing the possibilities of exposure to the threats looming in the Mediterranean region.

For MENA countries, coupled with barriers to the labour market and employment opportunities, women face institutionalised exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women's capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalising on opportunities presented by pluralistic interpretations of traditional gender norms, and entering both the work force and the public space. That being said, the gains achieved through social change in this region may not keep pace with the risks and threats arising from the lack of proper management policies for natural resources (particularly, groundwater resources in coastal aquifers) and the coastal zone, and growing threats of climate change and environmental degradation in the region. As with the European Mediterranean countries, burdens of emerging risks and shocks may fall on the vulnerable groups.

Given this gender and socioeconomic baseline in the region, the Child Project 2.1 is timely. Through its components (presented below), the project will enhance coastal zone sustainability with expanded compliance with the Integrated Coastal Zone Management (ICZM) Protocol (through preparation and adoption of national ICZM strategies and subnational coastal plans); increase water security and climate resilience of coastal populations by improving the sustainability of services provided by coastal aquifers and groundwater-related coastal habitats; and build capacity of policymakers, natural resources managers and other relevant stakeholders within the process.

The project addresses the current need to reinforce the institutional and technical capacity of stakeholders for the development and application of coastal and water resources management policies; to accelerate the implementation of priority actions to address issues of water stress, loss of biodiversity and coastal degradation; to promote integrated approaches for the management of natural resources in the coastal zone; and to build resilience towards climatic variability and environmental risks, and their concomitant socioeconomic repercussions. It also provides the means for the Mediterranean countries to sustainably manage the coastal areas and their resources, and to fill important knowledge gaps on coastal aquifers and their relationships with coastal ecosystems and the services they provide.

The proposed Child Project delivers on two of the outcomes associated with the following objectives of the GEF International Waters (IW) focal area, as defined by the GEF-6 strategy:

Focal Area Objective	Expected Outcome
IW-2 Programme 3	Outcome 3.1: Improved governance of shared water bodies, including conjunctive management of surface and groundwater through regional institutions and frameworks for cooperation, lead to increased environmental and socio-economic benefits; and,
IW-3 Programme 6	Outcome 6.1: Coasts in globally most significant areas protected from further loss and degradation of coastal habitats, while protecting and enhancing livelihoods.

The contributions to the outcomes of the programmatic objectives will be delivered through the following components of Child Project 2.1:

Component 1: Coastal Zone Management; and,

Component 2: Management of Coastal Aquifers and related Ecosystems.

Given the project's focus on capacity-building, technical and institutional strengthening, and policy formulation through ICZM and Integrated Water Resources Management (IWRM), a gender lens is both necessary and relevant for the project to achieve its primary objective of improving water security, human and ecosystem health, and climate resilience. Efforts will be made to incorporate the dimension of gender in a holistic manner in the project's activities, for example, by mainstreaming gender-responsive actions in the development of ICZM instruments and water resources management plans, by creating the impetus towards formulation of gender data-driven policy to inform water resources and coastal zone management approaches in the region, and by engaging stakeholders on gender and socioeconomic aspects within policy solutions. In this manner, the project can ensure both environmental and social co-benefits through its results framework.

Gender mainstreaming and promoting women's empowerment, by delivering environmental results, are increasingly the priority of both the GEF and UN Environment.

Having launched its initial gender policy in 2011, GEF approved a reinforced policy in October 2017², shifting the focus from a *gender-aware*, 'do no harm' approach to a *gender-responsive*, 'do good' approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environmental benefits.³

UN Environment recognizes the role of gender equality as a 'driver of sustainable environmental development'⁴, to not only assuage the stresses on natural resources including unsustainable management of water resources in coastal zones (derived particularly from aquifers), but as well to increase the visibility and capacity of vulnerable groups in sustainable developmental policy- and decision-making. To that end, the agency has recognized and produced a lessons-learnt report, through case study compilation, on gender integration in ICZM, marine and coastal plastic waste management, coastal disaster risk reduction and climate change adaptation, coastal developmental planning and advocacy for gender-inclusive ocean management and research.⁵

Thus, the imperative of this Gender Assessment is the inclusion of more gender-responsive elements throughout this propitious project. Alongside, the development of a dedicated Gender Action Plan (with clear timelines, responsible parties, indicators and budget allocations), based on the Assessment, will ensure that the project outcomes are achieved with gender priorities.

The evaluation of baseline conditions for this Gender Assessment is focused primarily on those countries where activities of the Child Project 2.1 will be executed on the ground, namely Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. Unique conditions in these countries have been analysed to enable the identification of specific entry points though which project interventions can promote greater

GEF. (2017) (news update)

² GEF. (2017) (publication)

Gender Equality and the Environment: Policy and Strategy. UN Environment. (2015)

Regional Seas Reports and Studies No. 207 (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)

gender equality, gender-equitable project benefits, and the empowerment of women. The Gender Action Plan, on the other hand, considers the full set of project activities at both the national and regional levels, to ensure coherent and actionable gender mainstreaming within these by leveraging sustainable development and environmental actions accessible to different genders, ethnic groups and vulnerable groups in the region.

2. Methodology

The Gender Assessment has three methodological building blocks:

- a. A comprehensive desk-review of existing literature was conducted on gender, natural resources management and climate change in Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia (and, more generally, in the Mediterranean, Western Balkans, and Middle East and North Africa MENA region). The literature review revealed useful data and research on coastal zone management and water resources management, and gender issues in the countries; however, these three thematic areas are not triangulated in mainstream research. Thus, a socioeconomic and gender indicators and baseline (Section 3) was derived to identify the potential impacts on different vulnerable groups and demographics, in view of the Mediterranean's designation as a global climate change hotspot, with threats to natural and managed resources, degradation of coastal systems and low-lying areas and marine pollution.
- b. Gender-responsive elements towards ICZM and IWRM, in the context of Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia, have been expounded upon in Section 4. Section 5 locates specific gender considerations and actions for the project outcomes, and presents normative information to gear the same towards better socioeconomic and environmental co-benefits.
- c. Section 6 explores the policy environment in the countries participating in Child Project 2.1, and presents a potential list of gender stakeholders, relevant for the project activities and collaborations during the project cycle.

3. Socioeconomic & Gender Indicators and Baseline in the Participating Countries

The nine Mediterranean countries participating in Child Project 2.1 (Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia), face different developmental challenges and socioeconomic disparities. As a starting point, this baseline borrows from UNDP's Human Development Index, Gender Inequality Index, and Gender Development Index. Additionally, it makes references to the Global Gender Gap Index (World Economic Forum) and compiles national-level poverty statistics (conducted by national authorities of the nine countries, as well as the World Bank, in some cases). These indices have differing methodologies, and are being employed, at the outset, as indicative (and *not* conclusive) measures of current levels of development, gender equality, and poverty and labour force participation.

As Booysen's research⁶ shows, composite indices present both challenges and advantages.

Booysen, F. "An Overview and Evaluation of Composite Indices of Development" in *Social Indicators Research*, (Vol. 59 No. 2). (2002)

It should be noted that numerous fallacies have been identified in the methodologies employed in composite indexing. These indices are mainly quantitative, and present empirical and aggregate measures of complex development phenomena, making values apparently objective, at the cost of subjective nuances. Yet, these also remain invaluable as useful supplements to income-based development indicators, understanding relative degrees of development, simplifying complex measurement constructs as well as providing access to non-technical audiences. To balance this dichotomy, ranks have been removed and have been linked in the footnoting, and the broader development categories (high/medium/low development) have been used.

TABLE I: HUMAN DEVELOPMENT INDEX (HDI)⁷

(out of 188 countries – United Nations Development Programme – UNDP, 2016)

Defining the HDI: This index measures and combines three basic dimensions of human development (long and healthy life, knowledge and decent standard of living) and provides an overall socioeconomic landscape of a country.

Relevance of the HDI: Since socioeconomic capital and security are crucial determinants of the capacities to adapt towards natural resource stress, loss of coastal livelihoods, marine and environmental degradation, and climate risks, this index indicates how poised each country may be to consider different resource management, resilience, adaptation and mitigation options.

Indicative, not conclusive: In line with Booysen's argument, the HDI should be treated as indicative, not conclusive. It provides an overview of relative degree of development in a particular country but remains a 'synthetic indicator'. Recent research has shown the need to supplement the HDI with other indicators associated with economic and social cohesion, sound development strategies, and sustainability in growth models.⁸

	Country	Relevance
*	Albania	With 'high human development', Albania's capacity to adapt to climate risks and variabilities is pegged well. However, due to regional variation in poverty rates (high in the Kukës prefecture – 22% v. Gjirokastër prefecture (qarks) – 8%, in particular ⁹) in the country, environmental services and social co-benefits may not be equitably shared.
	Algeria	With 'high human development', Algeria wields capital, largely derived from its oil economy, in readiness against climate shocks. However, due to high inequality in consumption, high unemployment rates (particularly, women and youth) and largely informal workforce ¹⁰ , environmental services and social co-benefits may not be equitably shared.
A THE STATE OF THE	Bosnia and Herzegovina (BiH)	With 'high human development', BiH's capacity to adapt to climate risks and variabilities is pegged high and similar to Algeria. As a post-conflict nation, however, educational attainment and labour market access continue to be determined by poverty status ¹¹ in the country, thus, environmental services and social co-benefits may not be shared.
JAN .	Egypt	With 'medium human development', Egypt's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited,

⁷ UNDP. (2016)

Bilbao-Ubillos, J. "The Limits of *Human Development Index"* in *Sustainable Development*, (Vol. 21 No. 6). (2011)

Poverty and Inequality in BiH. World Bank. (2011)

Portraits of Poverty and Inequality in Albania. <u>INSTAT (Albanian Institute of Statistics) & World Bank</u>. (2015)

¹⁰ "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

	Country	Relevance
		wherein the government may prioritise other pressing developmental pursuits. 12 With a volatile political climate, and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
	Lebanon	With 'high human development', Lebanon's capacity to adapt to climate risks and variabilities is pegged well. However, due to high concentration of income and wealth in the country ¹³ and the spill-over effects of the Syrian civil war, environmental services and social co-benefits may not be equitably shared.
C.	Libya	With 'medium human development', Libya's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritise other seemingly pressing developmental pursuits. With a volatile political climate challenging economic stability ¹⁴ , dependence on oil production and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
	Montenegro	With 'very high human development', Montenegro is poised to adapt well to climate risks. However, due to historic ethnic exclusionism (the Roma population, in particular ¹⁵) in the country, environmental services and social co-benefits may not be equitably shared.
	Morocco	With 'medium human development', Morocco's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritise other seemingly pressing developmental pursuits. Pronounced gender inequality in the country slows economic growth ¹⁶ , environmental services and social co-benefits may not be equitably shared.
•	Tunisia	With 'high human development', Tunisia's capacity to adapt to climate risks and variabilities is pegged well. However, due to concentration of income and wealth in the country ¹⁷ , high unemployment rates (particularly, youth) and economic unrest challenging political stability, environmental services and social co-benefits may not be equitably shared.

TABLE II: GENDER INEQUALITY INDEX (GII)¹⁸

(out of 159 countries - UNDP, 2016)

Defining the GII: This index, showing inequality in achievement between men and women in three aspects (reproductive health, empowerment and labour market), provides a useful gender baseline in terms of health equity, economic capital and financial access, speaking to the gender opportunities of men and women in the countries. This baseline has been elaborated upon using existing gender studies literature on each country.

Relevance of the GII: This index provides a primary understanding of the different levels of achievements on basic development indicators between men and women. This displays useful features towards the gender status quo hypotheses, which could then be derived in the context of this project.

Gender at a Glance: Montenegro. World Bank. (2015)

¹⁸ <u>UNDP</u>. (2016)

¹² Inequalities, Uprisings and Conflicts in the Arab World. MENA Monitor. World Bank. (2015)

Assouad, L. "Rethinking the Lebanese Economic Miracle". WID. (2017)

Libya Economic Outlook. World Bank. (2018)

[&]quot;Reducing gender inequality in Morocco can boost growth". <u>IMF.</u> (2017)

Tunisia: Economic Outlook. World Bank. (2018)

Indicative, not conclusive: In line with Booysen's argument, the GII should be treated as indicative, not conclusive. Pernmayer finds that the functional form of the index could be unclear, particularly the inclusion of indicators of relative performance of women vis-à-vis men, along with absolute women-specific indicators.¹⁹

	Country	Rank	Relevance
	Albania	51 st	In Albania, traditional beliefs continue to influence gender roles, particularly in the household setting. During socialist rule, although policies promoted women's presence in the public sphere (through education and work), the continued responsibility for unpaid domestic work remained with women (leading to time poverty or 'double shifts'). During the transition to a capitalist economy, gender equality laws were not put in place for private sector jobs, and thus, employment for Albanian women could not be safeguarded. ²⁰
	Algeria	94 th	In Algeria, social codes affect women's empowerment. Since labour force participation disparity is pronounced, women lag behind on economic capital needed to combat risks arising from environmental degradation, mismanagement of warer and coastal resources, and climate shocks. According to the Arab Barometer, in 2017, compared to 2013, a greater number of Algerians regarded higher education as more important for men, as well as reinforced the notion that married women should be ideally relegated to household duties. ²¹ This also makes them dependent on the patrilocal structure of Algerian society.
STORE TO SERVICE AND ADDRESS OF THE PARTY OF	Bosnia and Herzegovina (BiH)	34 th	Despite progress in closing the gender gap in endowments - mainly in education among the younger generation - BiH still faces a number of gender issues, particularly in women's access to economic and employment opportunities. Alongside improved educational outcomes, significant gaps remain in labour market participation and employment in favour of men, as women continue to face challenges in accessing economic opportunities. Additional obstacles continue to exist for women in exercising agency (the power to choose and decide options to preserve to act for oneself), particularly managing domestic work, lack of political representation and participation as well as widespread gender-based violence.
1/3	Egypt	135 th	Political, social and economic capital are not equitably distributed among Egyptian men and women. Without access to these vital resources, the risks identified by Child Project 2.1 will only burden those at the lower echelons of society. Despite improvement of young women's education levels in recent times, the workforce participation and retention rates remain unperturbed, signalling a stagnated job market and scarce employment opportunities. ²³ Egypt also faces some particular gender-specific barriers in high numbers, such as FGM and sexual harassment, arising out of sexual inequality between men and women in the country.
	Lebanon	83 rd	Lebanese women face the least gender disparity in the Arab world with their male counterparts. Despite this, discriminatory social codes, particularly the focus on intersectional civil and family laws, continue to impede women's empowerment. ²⁴ Although the gender gaps at higher levels of education are reversing, women continue to

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Pernmayer, I. "A Critical Assessment of the UNDP's Gender Inequality Index" in *Feminist Economics*, (Vol. 19 No. 2). (2013)

world Bank. (2012)

[&]quot;Droits des femmes en Algérie: les lois progressent mais pas les mentalités". Middle East Eye. (2017)

BiH: Economic Mobility, Jobs and Gender. World Bank. (2016)

Egypt: Country Gender Assessment. World Bank. (2010)

Lebanon: Country Gender Assessment. European Union. (2015)

	Country	Rank	Relevance
			face entry barriers to the labour market as well as time poverty due to the predominance of unpaid care work.
C	Libya	38 th	Women in Libya have had a long history of actively participating in the economic, social and political development of the country, going back to the 1950s. Yet, with Gaddafi's introduction of the <i>Declaration of the Authority of the People</i> in 1977 and the <i>Great Green Charter of Human Rights in the Age of the Masses</i> in 1988, these rights were compromised at a substantive level. 25 Furthermore, traditional family laws, as a general trend in the MENA region, continue to disadvantage women and exacerbate their time poverty. The 2011 uprisings signalled that women were entering the public space, yet changes in women's empowerment has been sluggish in the past seven years.
*	Montenegro	33 rd	Montenegro is relatively advanced in terms of progress towards gender equality. This enhances the capacities of Montenegrin men and women to face climate-risks and capitalise on adaptation opportunities. However, gender-inequitable dynamics remain in important determinants such as access to labour markets, health equity et al, rendering certain demographics vulnerable.
	Morocco	113 th	Political, social and economic capital are not equitably distributed among Moroccan men and women. Without access to these vital resources, climate risks will only burden those at the lower echelons of society. Gender equity is labour force participation is one of the lowest in the world ²⁶ , disadvantaging women further: women lag behind on economic capital needed to combat climate shocks and risks.
0	Tunisia	58 th	In Tunisia, traditional social codes affect women's empowerment. Since labour force participation disparity is thoroughly pronounced, women lag behind on economic capital needed to combat climate shocks and risks. This also makes them dependent on the patrilocal structure of Tunisian society. However, the January 2011 uprisings signalled that women were entering the public space, leveraging opportunities for their economic empowerment, ²⁷ although it remains to be seen if the force of this societal shift can keep pace with climate risks.

TABLE III: GENDER DEVELOPMENT INDEX (GDI)²⁸

(grouped in 5 categories, 1: high equality to 5: low equality – UNDP, 2016)

& GLOBAL GENDER GAP INDEX (GGI)²⁹

(out of 144 countries – World Economic Forum – WEF, 2017)

Defining the GDI & GGI: The GDI (UNDP) index shows the ratio of female to male HDI values. GDI expresses values in deviation, hence, in order to facilitate understanding GDI grouped categories have been used (as grouped by UNDP) to show the absolute deviation from gender parity in HDI values. This further reiterates the results of the HDI and GII (also by UNDP), and shows the real gender gap in human development achievements.

The GGI (WEF) benchmarks 144 countries on their progress towards gender parity on four thematic dimensions – economic participation and opportunity, educational attainment, health

29 <u>WEF</u>. (2017)

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²⁵ Libya: Country Profile. Gender Concerns International. (2015)

Morocco: Country Gender Assessment. World Bank. (2015)

Gender in MENA Projects: Tunisia. World Bank. (2011)

^{28 &}lt;u>UNDP</u>. (2015)

and survival, and political empowerment. The Index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, over time.

Relevance of the GDI & GII: Since the GDI and GGI use different methodologies, and are conducted by different agencies, this report does not suggest a causality between the two indices. However, a correlation is undeniable, and both indices pick up similar rates of gender disparity in the CP 2.1 countries.

Indicative, not conclusive: In line with Booysen's argument, the GDI & GII should be treated as indicative, not conclusive. Geske Dijkstra and Hanmer find that although gender-related development indices have increased attention towards 'feminization of poverty and underdevelopment', more robust data needs and indicators are required to create aggregate indices that are sensitive to contemporary trends in gendered privation, particularly with the categorization of 'women'.³⁰

	Country	GDI – Group	GGI – Rank	Relevance
*	Albania	Medium-high equality	38 th	Despite being categorised as a country with high HDI, a pronounced gender gap in Albania is evinced from the grouping and ranking.
	Algeria	Low equality	127 th	Algeria, with Tunisia, shows the greatest disparity in development and gender equity rankings. Despite being categorised as a country with high HDI, an entrenched gender gap is revealed.
ATTENDED TO	Bosnia and Herzegovin a (BiH)	Medium-low equality	66 th	Despite being categorised as a country with high HDI, a pronounced gender gap in BiH is evinced from the grouping and ranking.
3/31	Egypt	Low equality	134 th	The gender gap in Egypt is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
	Lebanon	Low equality	137 th	The gender gap in Lebanon is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
G	Libya	Medium-high equality	Not available	NA
	Montenegro	Medium-high equality	77 th	Although Montenegro features among the upper categories of the previous indices, this reveals a more entrenched gender gap. Women lag behind their male counterparts, in a greater amount than expected, despite very high human development achievements in the country.

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Geske Dijkstra, A. & Hanmer, L. C. "Measuring Socio-Economic Gender Inequality: Towards an Alternative to the UNDP Gender Index" in *Feminist Economics*, (Vol. 6, No. 2). (2000)

	Country	GDI – Group	GGI – Rank	Relevance
	Morocco	Low equality	136 th	The gender gap in Morocco is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
0	Tunisia	Medium-low equality	117 th	Tunisia, with Algeria, shows the greatest disparity in development and gender equity rankings. Despite being categorised as a country with high HDI, an entrenched gender gap is revealed.

TABLE IV: SOCIOECONOMIC FACTORS

Note: This table is compiled from various sources, and determines poverty levels (according to USAID income grouping), rural-urban divide and labour force participation parity in the Child Project 2.1 countries.

*Poverty Level: EnvironmentalClimate change is a threat multiplier, and often its impacts combine with poverty, hence this is an important indicator, corroborating HDI ranking.

*Rural-Urban Divide: Climate risks take different forms in rural and urban areas, but lack of development and investment in rural areas (particularly in the Mediterranean) often impedes adaptive capacities of vulnerable demographics, who also derive their livelihoods (in this case, coastal livelihoods) from managed and natural resources.

*Labour force participation parity (% of working age population active)³¹: In the Mediterranean, one of the prime arenas of gender disparity is labour force participation parity. The region is plagued with high unemployment rates³² (12.5% average), and this phenomenon remains a gendered one: women and youth are less likely to employed than men, as a general trend. Additionally, the existing gap in labour force participation indicates that women possess less economic capital, and are limited to gendered (mostly unpaid care work) roles. This directly correlates to lessened participation in coastal economies and scarce or unstable livelihoods; lack of decision-making power both within the household and larger policy frameworks such as coastal resource use and water management; and, greater exposure to repercussions of marine environmental degradation, water stress and potential climate risks (which often acts as a threat multiplier, in this context).

See Table IV from p. 11.

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World Employment and Social Outlook: Trends for Women. <u>ILO.</u> (2017) "Unemployment: The Mediterranean Effect", World Bank. (2012)

Country	Poverty Indices	Rural-Urban	Labour Force Participation
Albania	1.2% below the National Poverty Line. ³³ The Multidimensional Poverty Index ³⁴ reveals that 7.2% of Albanians are precariously 'near' poverty.	Diber and Kukes qarks (prefectures) show lowest rates of urbanisation, and related issues: fragmentation, population decline, et al. Tirana and Durres, on the other hand, have the highest level of urbanisation and best performance on demographic and geographic indicators. Trans and often unbridled, leading to environmental complications as well as socioeconomic tussles.	40% female 60.7% male During the socialist rule, the government policy of full employment boosted female participation and, as a consequence employment rates were higher than the average figures of the OECD countries. Policies such as investment in childcare facilities and female education stimulated women to enter and remain in the labour market. The market economy disadvantaged women by providing unstable employment opportunities, although education outcomes and employment sectorial options have improved in recent decades, leading to the widening of the gender gap in labour force participation. 36
Algeria	11.8% below the National Poverty Line. ³⁷ The MPI is unavailable for the country. However, the Ligue Algérienne pour la Défense des Droits de l'Homme (LADDH) reports that about 35% (14 million) of Algerians are in poverty. ³⁸	Poverty in Algeria has a distinctly urban face: 75% of the country's poor live in cities, undertaking informal jobs without access to social safety nets. Additionally, the disproportionate rates of urban poor show that the incidence of poverty in the Algerian Sahara are twice as much than among people living in the Steppe. ³⁹	19.0% female 70.4% male Female labour force participation is low in Algeria, relating to the phenomenon that the gender difference in the labour force participation of the MENA region is the widest in the world. 40 However, according to ILO, the status quo is slowly altering (although not quite at an ideal pace), as there are marked difference between participation rates from 2011 to 2018. 41

Regional disparities in Albania. UNDP. (2010)

Regional disparities in Albania. UNDP. (2010)

Calculated by the Oxford Poverty and Human Development Institute (OPHI), and UNDP, the global Multidimensional Poverty Index (MPI), measures acute poverty in developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations with regard to different indicators: education, health, and living standards. The index not only identifies those living in multidimensional poverty, but the extent (or intensity) of their poverty. The MPI can help the effective allocation of resources by making possible the targeting of those with the greatest intensity of poverty; it can help address some SDGs strategically and monitor impacts of policy intervention. See UNDP's Technical Notes (2016) for more.

Garcia-Pereiro, T. "The Determinants of Female Employment in Albania". Open access on <u>ResearchGate</u>. (2016)

Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

See <u>Lique Algérienne pour la Défense des Droits de l'Homme</u> (LADDH) for more.

[&]quot;Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

Women face the highest proportion of legal restrictions (*de jure* discrimination) in the MENA region, as

	Country	Poverty Indices	Rural-Urban	Labour Force Participation
A PARTIE AND A PAR	Bosnia and Herzegovina (BiH)	15% below the National Poverty Line. 42 The MPI reveals that 3.2% of the populace are precariously 'near' poverty.	BiH remains one of the most rural countries in Europe – with over 60% of its populace residing in rural areas. 43 The rural poverty rate is higher than urban areas, although income dynamics are similar. 44	34.4% female 58% male Between the years 1992-1995, Bosnia and Herzegovina went through a destructive war that resulted in mass emigration of around 50% of the total population. In the period after the war, although considerable number of refugees returned, it remains unclear how the jobs market was affected around the time. With the failing of the state's strong social protection services such as long-term care, child care and elderly care, and new categories of 'returnee refugees' and 'internally-displaced people', women bear the brunt of unpaid care work. Although more women attend university than men, they continue to face sociocultural barriers in entering the labour force. 45
	Egypt	27.8% below the National Poverty Line. 46 Although extreme poverty has been virtually eradicated, Egypt is yet to turnaround the effects of the 2011 Arab Springs on its economy, leaving a third of Egyptians in precarious poverty. Particularly, high inflation over 2015-17 has lowered the purchasing power of households. 47	Regional disparities continue to be a part of the country's landscape, with upper rural Egypt showing poverty rates three times higher than metropolitan Egypt. 48	22.8% female 76.1% male Female labour force participation is low in Egypt, relating to the phenomenon that the gender difference in the labour force participation of the MENA region is the widest in the world. 49 This is a significant loss as including women and enabling conditions to retain them in the workforce can boost the growth rate of the Egyptian economy. 50 In recent times, Egypt's performance on health and education indicators is improving, and this could change labour dynamics.

well as sociocultural norms (*de facto* discrimination) that stipulate limits to women's entry in the public, and working sphere. Young females are particularly discouraged from seeking employment.

- This <u>ILO report</u> (2014) expounds on the factors affecting employment and labour force participation in Algeria.
- Poverty and Inequality in BiH. World Bank. (2011)
- Rural Development in BiH: Myth and Reality. UNDP. (2013)
- Poverty and Inequality in BiH. World Bank. (2011)
- This <u>ILO report</u> (2011) expounds on the factors affecting employment and gender in BiH.
- Egypt: Economic Outlook. World Bank. (2018)
- 47 *Ibid.*
- 48 Ibid.
- ⁴⁹ ILO. Women in Business and Law. (2014)
 - The Economic Research Forum (ERF), a regional forum on economic research in Arab countries, Turkey and Iran finds that encouraging the participation of women in the labour force, particularly the 'married women' demographic could usher in rapid growth for the Egyptian economy. See here.

Country	Poverty Indices	Rural-Urban	Labour Force Participation
Lebanon	30% below the Middle-Income-Country Poverty Line. 51 Although GDP increase in Lebanon remains steady, the country faces the economic and social impact of the Syrian crisis. With the influx of 1.5 refugees, Lebanon's public finances, service delivery, and the environment have been strained, increasing poverty headcount and unemployment. 52	Lebanon's population is 87% urban, concentrated particularly in Beirut. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector. In the rural areas, different causes entrench poverty: social protection and government service delivery are limited in these remote and mountainous regions.	Female labour force participation is low in Lebanon, relating to the phenomenon that the gender difference in the labour force participation of the MENA region is the widest in the world. This is a significant loss as including women and enabling conditions to retain them in the workforce can potentially boost the growth rate of the Lebanese economy. ⁵³ Recent studies, however, show that Lebanon is leading the growth rate of female participation in labour force in the MENA region. ⁵⁴
Libya (references 55 & 56 for Libya on p.14)	40% below the Middle-Income-Country Poverty Line. Although economic growth is projected to rebound at around 15% in 2018, Libya's oil-dependence does not benefit the majority of the Libyan populace. High inflation coupled with weak basic service delivery have exacerbated socioeconomic exclusion in the country. Libya continues to experience conflict and insecurity.	Libya's population is 85% urban, concentrated particularly in Tripoli, Benghazi, Misrata and Bayda. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector.	Female labour force participation is very low in Libya, relating to the phenomenon that the gender difference in the labour force participation of the MENA region is the widest in the world. Women often take on informal sector roles, particularly starting their own small busineeses, despite receving higher rates of advanced education than men (77% versus 63%). Movement in Libya for women is severly limited, and is another deterrent to workforce participation.

Lebanon: Rapid Poverty Assessment. <u>UNDP</u>. (2016) Lebanon: Economic Outlook. <u>World Bank</u>. (2017) Find more on Lebanon on the ERF <u>website</u>. See this AN-NAHAR <u>coverage</u>.

Country	Poverty Indices	Rural-Urban	Labour Force Participation
Montenegro	8.6% below the Middle-Income-Country Poverty Line. 57 In Montenegro, there has been sustainable reduction in poverty in the last five years.	60.5% of the rural populace are classified poor. ⁵⁸ In 2010, MONSTAT finds that not only are the rural populace are at a higher poverty risk, they also face more entrenched forms of poverty. ⁵⁹	As the country emerged from dirigisme, social property was privatised, and the economy sprouted 'grey areas' of undeclared or unregulated work. Post-conflict Montenegro is still reeling from the economic effects of war, which increased unemployment (17.8% in 2016) ⁶⁰ and bolstered GDP loss. The Roma populace face entry barriers to the workforce, and employment rates are far below national averages: 47% Roma male and 8% Roma female are employed.
Morocco	15.5% below the Lower-Middle-Income-Country Poverty Line. ⁶¹ In Morocco, there has been steady decline in poverty, though the underlying factors may be remittances, deceleration of population growth and macroeconomic stability. Inequalities between rich and poor are still abound, and poverty essentially has a rural face in the country.	3 million out of the 4 million poor live in rural areas ⁶² The subjective poverty rate has increased by 15% from 2004 figures in rural Morocco. Meanwhile, the urban poverty rate is half of the national average in 2001, and in 2014, stands at one-third. ⁶³	25% female 74.1% male Female labour force participation is low in Morocco, relating to the phenomenon that the gender difference in the labour force participation of the MENA region is the widest in the world. ⁶⁴ However, Morocco is entering a period potential demographic dividend, with the number of working-age population, relative to below 15 and above 64 years, increasing. This could either signal a potential economic boom or an unemployment crisis, if economic activity is not encouraged and made

⁵⁵ Libya: Country Profile. UN-Habitat. (2016)

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See Al Jazeera <u>coverage</u> of The Voice of Libyan Women.
The middle-income country Poverty Line, as defined by the World Bank, stands at consumption 57 below the standardized poverty line of \$5.50/day. World Bank. (2017)

⁵⁸ MONSTAT. (2010)

⁵⁹ MIDAS Project, World Bank. (2016)

⁶⁰ World Bank. (2016)

⁶¹ The lower-middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$3.10/day. World Bank. (2017)

⁶² Fair Observer. (2017)

⁶³ World Bank. (2018)

ILO. Women in Business and Law. (2014)

Country	Poverty Indices	Rural-Urban	Labour Force Participation
	reveals that an additional 12.6% of Moroccans are dangerously 'near' poverty. Among the 15.5% poor, 5% are in 'severe' multidimensional poverty.		inclusive for the marginalized. ⁶⁵
Tunisia	24.7% below the National Poverty Line. ⁶⁶ Poverty rates in Tunisia have seen a significant increase, from 15.5% (2010) to 24.7% (2018). Income disparities are high: the top 20% of Tunisians earn 46% of the national income, while the bottom 20% earn only 5.9%. ⁶⁷ Civil unrest since the 2011 has increased poverty and unemployment, and discouraged entrepreneurs and private sector actors.	Rural areas in Tunisia remain marginalized and underprivileged, leading to high rates of rural to urban migration, particularly towards Greater Tunis and its agglomeration economies. 68	25.1% female 71.3% male Female labour force participation is low in Morocco, relating to the phenomenon that the gender difference in the labour force participation of the MENA region is the widest in the world. 69 Like Morocco, Tunisia faces crucial demographic transition in the coming years, yet barriers to the job market remain high. Young women are particularly vulnerable and face exclusion from economic activities. 70

4. Gender Perspectives on ICZM, Water Resources Management and Coastal Economies

Below are the intersectionalities⁷¹ of ICZM, water resources management and coastal economies on the socioeconomic and gender baseline, alongside the general human impacts identified in project document for Child Project:

a. ICZM, water resources management and gender

Despite a growing trend of feminist ecology and inclusive environmentalism literature on gender and environmental links, studies on gender and natural resource use/management

This <u>ILO report</u> expounds on the factors affecting employment and gender in Tunisia.

This <u>IFAD report</u> expounds on the factors affecting employment and gender in Morocco.

[&]quot;Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

Tunisia: Economic Outlook. World Bank. (2018)

Amara, M., Jemmali, H. & Ayadi, M. "Rural-Urban Migration and Income Disparity in Tunisia". <u>Economic Research Forum.</u> (2017)

ILO. Women in Business and Law. (2014)

Since there is a paucity of data, some impacts are extrapolated but cannot be deemed conclusive.

(in this case, coastal and water resources, primarily) remain relatively scarce. Lack of knowledge about a majority of the resource users, their unequal representation in decisionmaking processes and managerial positions and the general tendencies to simplify gender environment linkages into 'women's empowerment', may result in partial and counterproductive management strategies.⁷² Women and men use and manage marine and coastal ecosystems differently, have specific knowledge, capabilities and needs related to these, and are differently impacted by water stress, degradation of marine environment, mismanagement of coastal and other natural resources, and loss of coastal livelihoods. Historically, the contributions of women in onshore fisheries, aquaculture, processing and trading of marine products, in managing plastic and other waste from urban and tourist growth, and their important role in conservation and disaster-risk reduction initiatives in marine and coastal areas have been routinely ignored or underestimated in research, management and policy. 73 There is now increasing recognition that sustainable and integrated marine and coastal ecosystem management requires gender-sensitive and gender-responsive planning, implementation, monitoring and evaluation at project, policy and grassroots level.⁷⁴ This recognition is evident in the Call for Action⁷⁵ issued by Member states at the UN Conference to Support the Implementation of Sustainable Development Goal 14 (UN Ocean Conference) held in June 2017, which highlighted the crucial role of women in the implementation of Sustainable Development Goal 14, "conserve and sustainably use the oceans, seas and marine resources for sustainable development". 76 At the same time, gender forms one of the four pillars upon which IWRM is based. The Dublin Statement on Water and Sustainable Development - the document that established the guiding principles of IWRM - states that "women play a central part in the provision, management and safeguarding of water". 77

Thus, Child Project 2.1's primary gender mainstreaming concern would be to address the policy-level disparity among women and men⁷⁸, through gender-equitable ICZM processes, increased gender parity in IWRM, particularly inclusion in community coastal and water management units (water insecurity is a specific issue in MENA and the Mediterranean region, see sub-section b), and empowering women and vulnerable groups in the decisionmaking process. These policy frameworks have to take stock of how gender activities flourish in different ecosystems, in the backdrop of social codes, division of labour, established cultural symbolism, and robust or changing identities. With Output 1.1 (Activities 1.1.1 & 1.1.2), Output 1.3 (Activities 1.3.1 & 1.3.2) good ICZM instruments will be put in place, reflecting a gender-aware and gender-responsive outlook, to assuage previous shortcomings in providing equitable access to meet the needs of vulnerable groups, and to address lack of responsibility and accountability. With Output 2.1 (Activity 2.1.1), Output 2.2 (Activities 2.2.1 & 2.2.2), Output 2.3 (Activity 2.3.1) and Output 2.5 (Activity 2.5.4), water governance will be strengthened, and the dimension of gender will be addressed in the assessment of coastal aquifers and subsequent development of management plans, and in the activities to promote

⁷² Torre-Castro, M, et al. "Gender analysis for better coastal management - Increasing our understanding of social-ecological seascapes". Marine Policy. (Vol. 83). (2017)

⁷³ Regional Seas Reports and Studies No. 207 (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)

⁷⁴

⁷⁵ A/RES/71/312 - Our ocean, our future: call for action. 76

⁷⁷ Proceedings of the International Conference on Water and the Environment (ICWE) held in Dublin, Ireland from 26 to 31 January 1992.

⁷⁸ Cleaver, F. & Hamada, K. "Good water governance and gender equity". Gender and Development. (Vol. 18, No. 1). (2010)

solutions and build stakeholders' capacity to manage surface water and groundwater in a conjunctive manner.

b. Access to water resources

The IPCC AR5 identifies the Mediterranean region as 'highly vulnerable to climate change', leading to 'multiple stresses and systematic failures'⁷⁹. One of the primary impacts will be on water resources and their availability for economic sectors and dependent ecosystems.

Since water is an economic, a social and an environmental good, lack of effective planning could both impede (and reduce chances of improvement for) the water access status quo, as well as worsen and increase water insecurity.

In the Mediterranean region, water is predominantly received from public sector institutions. While this is a significant improvement, there is a general move towards water pricing in the region, particularly in urban areas. Hence, within IWRM and other water policies, guidance on tariff structures should be developed to serve the dual purposes of economic efficiency and social equity.⁸⁰

Women, and adolescent girls, particularly in the MENA region, disproportionately shoulder the burden of household water provision in rural areas.⁸¹ This leads to a phenomenon called 'time poverty', defined as a situation where a certain person's time is inflexible, consumed by non-remunerative and non-productive tasks, perpetuating their absence from decision-making and raising the opportunity costs for other profitable pursuits. With depleting water resources, these demographics may be faced altered time-use patterns, particularly more time spent in collecting domestic water.

Thus, Child Project 2.1 could positively impact this status quo through Component 2's various outputs (and subsidiary activities), which seek to enhance water security of coastal populations through improved sustainability of aquifer services.

c. Coastal economies, livelihoods and tourism

Gender is a critical organizing category of socioeconomic dynamics in the coastal space: it shows not only who is working where, but also the diversity of activities and concomitant gender domination within each ecosystem. Coastal zones form the bedrock of both the Mediterranean civilization and environment – impacting local livelihoods and economies, climate patterns, agricultural practices and the tourism industry. With predicted rise in water insecurity, coupled with changes in the coastal climate, coastal erosion (leading to inland migration of beaches), and loss of biodiversity, vulnerable groups and their coastal livelihoods are likely to be adversely affected.

Since the World Bank identifies the travel and tourism sector as an important economic determinant in the region⁸², water stress and coastal resource misuse are likely to impede this industry. With climate change, additionally, tourism patterns are likely to change and predicted to dwindle, affecting the many, often informal, livelihoods dependent on the sector.

Women and Tourism: Designing for Inclusion. World Bank. (2017)

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According to the IPCC AR5, "the Mediterranean region will suffer multiple stresses and systemic failures due to climate changes. Changes in species composition, increase of alien species, habitat losses, and degradation both in land and sea together with agricultural and forests production losses due to increasing heat waves and droughts exacerbated also by the competition for water will increase vulnerability." (2014)

Biswas, A. "Water as a Human Right in the MENA region". *Water Resources Development.* Vol. 23, No. 2. (2007)

Beyond Scarcity: Water Security in the Middle East and North Africa. World Bank. (2018)

Additionally, risks may impede the particular benefits derived by women (and men) from this sector: these benefits include increased participation in the workforce, entrepreneurship, and flexible work opportunities.

Thus, Child Project 2.1 has the potential to positively impact coastal economies and livelihoods in the region by promoting the sustainable use of coastal resources through new ICZM instruments, by building the knowledge base to improve the management of water resources the coastal zone and to protect coastal aquifers and groundwater bodies, while delivering concomitant social benefits.

5. Gender-responsive Considerations for the Project Components

a. Gender-responsive ICZM, water resources management and stakeholder analysis

Although the economic and environmental benefits of coastal and water resource management policies are undeniable, cost and benefits may not be distributed equally among stakeholders or societal groups, creating incentives for a select few to implement these. As Section 3 demonstrates, given unequal rights and access, and environmental stewardship, women and other marginalized groups continue to be nominal stakeholders in the decision-making and planning frameworks of coastal and water resources (and in processes relevant to management of coastal aquifers, particularly). The following gender elements⁸³ will be considered in ICZM and IWRM processes in the countries to ensure greater gender equality:

- Expand women's participation in coastal planning and management bodies. This would require taking stock of access (reach of different resources), use (activities performed in particular contexts), and goods and services (how men and women derive different ecosystem services).
- > Support reforms to collateral requirements, including increased women's land ownership or group-based schemes, to enable investments in harvesting, production, and processing activities related to fishing, mariculture, and aquaculture.
- > Improve (and develop) women's access to more profitable segments and employment within the fisheries, agriculture, and tourism value chains, in the larger context of coastal economies and livelihoods.

In the design and implementation, various gender-responsive actions⁸⁴ will be mainstreamed within the Child Project 2.1 results framework:

- As with other natural resources management processes, *stakeholder consultations* with governments, national institutions responsible for natural resources management, committees, cooperatives, tourism employees, and entrepreneurs will provide project design ideas and feedback on proposals, with site-specific gender-focused enquiries and engagement.
- Gender-sensitive institutional analyses can focus on the executing ministry/agency at relevant levels, and for different country partners, if relevant. These analyses, with stakeholder consultations, help to identify gender capacities (knowledge of gender gaps,

84 Ibid.

Adapted from <u>Integrating Gender in Climate Change Adaptation Proposals</u> sourcebook Developed by USAID Adapt Asia-Pacific, and hosted on the APAN.

- why the gender lens is relevant, for example), and weaknesses among staff and in programming.
- > Institutional mapping can identify possible partnerships and expertise available to support gender mainstreaming.
- At a local level, a closer look is needed at gendered access and use rights to water resources and terrestrial and marine resources, participation in household and community decision-making, and the ecotourism gender division of labor. Conflict mapping for a specific area can pinpoint conflicts between different communities and sub-groups and protected area authorities over access rights to resources. These analyses will suggest specific policy reforms and local arrangements for improving women's access to coastal resources, credit and more accessible markets, and higher value tourism-related activities.

ICZM strategies and plans also need to recognize and safeguard the key role local people and their artisanal techniques can play in building coastal and water resources management strategies, preventing environmental degradation and mitigating climate shocks. ⁸⁵ An agenda fully incorporating artisanal, traditional and indigenous inputs is likely to have more sustainable and equitable outcomes- especially, in terms of having an exit strategy and continuity – than one involving only government, international actors and/or the private sector. A robust time-use analysis must be conducted to understand the specific roles, responsibilities, and opportunities men and women possess in the project activity sites of both the countries. This will ensure that resource management plans and strategy frameworks are gender-responsive and participatory, and do not burden women's existing time-use in the countries.

b. Gender-responsive training modules

As the 2018 edition of European Development Days indicated, the international dialogue on development aid, environmental action and climate finance is increasingly shifting towards gender mainstreaming, risk and vulnerability assessment, and social development. Child Project 2.1's Output 1.4, Output 1.5, Output 2.2, and Output 2.3, through the awareness and capacity-building interventions, must address the 'business as usual' approach in most countries entail 'ring-fencing' of budgets, with lip-service paid to important issues of social inequalities and gender inequities. Development, environmental, resource management and climate change agendas often relegate gender among lower priorities, particularly without dedicated budget line and tangible investment to address the issues.

Thus, methodological guidelines and training modules must include gender rubrics and mainstreaming parameters, such that future projects are able to emulate and incorporate robust gender and socioeconomic action points. Awareness campaigns will also be crucial to correlate climate and gender issues, and disseminate critical, region-specific information to different stakeholders (such as local communities, NGOs, associations, actors from the private sector and schools).

See Subsection C from p. 20.

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⁸⁵ Convenient Solutions to an Inconvenient Truth: Approaches to Climate Change. World Bank. (2010)

c. Gender-responsive Monitoring and Evaluation (M&E) framework, existing knowledge gaps and sex-disaggregated data collection

The Child Project 2.1 has the critical task of scaling up efforts to translate ICZM and IWRM principles into effective management approaches on the ground in the Mediterranean region. It is imperative to be able to develop gender-sensitive indicators and socioeconomic metrics, and collect sex-disaggregated data in the M&E phase to understand the impact of the Child Project 2.1 on different demographics in the region. In line with the Sustainable Development Goals (SDGs) 1 (Target 1.586), 5 and 13, the project will have to deliver on verifiable means to understand the MedProgramme's impact on vulnerable groups' capacities to cope with natural resource depletion, water stress, environmental degradation, loss of livelihoods et al. As recent research has shown⁸⁷, there is also a lack of rigorous gender-based studies in coastal/marine areas. Much of the information is anecdotal - a key issue that the Child Project 2.1 can address through stakeholder consultations as well as post evaluation and M&E. Assuaging this knowledge gap with technical interventions and robust sexdisaggregated data will contribute to the broader field of feminist political ecology (particularly, by laying the ground for expansion and meaningful comparison in studies about other systems such as freshwater and forestry), and be an asset for future interventions both in the region and globally.

6. Policy Environment and Gender Stakeholders in the CP 2.1 Countries

This section explores the policy environment in the countries participating in Child Project 2.1, and presents a potential list of gender stakeholders, relevant for the site-specific activities and collaborations during the project cycle. Legal tools, and enabling policies are crucial in ensuring gender inequality can be address through tangible and formal procedures. This table, compiled from various sources, particularly UN Women and the Equal Futures Partnership, thus, takes stock of international conventions, national laws and policies, and country-level stakeholders that can aid the Child Project 2.1 in gender mainstreaming and narrowing socioeconomic gaps.

TABLE V: POLICY ENVIRONMENT, LEGAL FRAMEWORKS, & STAKEHOLDERS

See Table V from p. 21.

Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters. (SDG 1, UN)

Torre-Castro, M, et al. "Gender analysis for better coastal management – Increasing our understanding of social-ecological seascapes". *Marine Policy*. (Vol. 83). (2017)

		Policy Tools,	
	Country	Legal Instruments, Institutions	Provisions
		1994 – CEDAW	Albania signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994.
		1998 (amended 2012) – Constitution of the Government of Albania	Article 18 establishes that all are equal before the law. No one may be unjustly discriminated against for reasons such as gender, race, religion, ethnicity, language, political, religious and philosophical beliefs.
*	Albania	2016 - 2020 – National Strategy and Action Plan on Gender Equality	The Strategy and the Action Plan represent a commitment for 2016 – 2020, with concrete interventions towards economic empowerment of women and men, ensuring actual participation and engagement in political and public decision-making processes; reducing gender-based violence and domestic violence and strengthening the coordination and monitoring role of the national mechanism of gender equality.
		Institutions	Ministry of Social Welfare and Youth (with contribution of the Inter-Agency Working Group)
			Ministry of Justice National Referral Mechanisms
		1996 – CEDAW	Algeria signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996.
	Algeria	2008 – Constitution of the Government of Algeria	Under the Algerian Constitution, women enjoy the same civil and political rights as men, and have the status of full citizens (Articles 29 and 31).
		Institutions	Ministry of National Solidarity, Family Affairs and Status of Women
		1993 – CEDAW	BiH signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
CHARLES OF THE PARTY OF THE PAR		2006 – Law on Gender Equality	Bosnia's Gender Equality Law provides definitions for direct and indirect discrimination, as well as gender-based violence and sexual harassment. It mandates the creation of gender equality of gender equality strategies and programmes in education, employment, access to resources, social protection, etc.
	Bosnia and Herzegovina (BiH)	2014 - 2017 – National Action Plan on Gender	The NAP addresses the gender rights principles laid out in the national law, and works towards improving women's participation in public life and decision making, and particularly target the legacy of human trafficking and sexual slavery in the country's post-conflict context.
		Institutions	Agency for Gender Equality of Bosnia and Herzegovina
			Ministry of Human Rights and Refugees

		1981 – CEDAW	Egypt signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1981.
	Egypt	2014 – Constitution of the Government of Egypt 1937 – Criminal Code of the Government of Egypt	The two main legislations protecting and supporting women are the Egyptian Constitution of 2014 (Articles 11, 53 and 214) and the Criminal Code of 1937. Crimes against women in Egypt are divided in two groups: misdemeanours and felonies. Misdemeanours, such as catcalling, are usually punished by fines with shortened trials. Felonies, like FGM and rape, are permanent criminal offences, punished by longer jail time.
		Integrated Gender Programme (UNDP, UN Women and UNFPA)	The integrated programme is helping to address multi-faceted challenges faced by women and young girl through three pillars of social, legal and economic empowerment. A similar EBRD project for the MENA region is active in Egypt as well.
		Institutions	National Council for Women
		1997 – CEDAW	Lebanon signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1997.
**	Laboron	1936 – Constitution of the Government of Lebanon	The Lebanese legal system is primarily based on French Civil Code and Egyptian legal systems. Whilst there is no unified civil law in Lebanon, the Lebanese Constitution promulgated in 1926 articulates the principle of equality among all citizens (Articles 7 and 12).
	Lebanon	Women's International League for Peace and Feminism – ABAAD Resource Centre of Gender Equality	WILPF and ABAAD are leading national consultations to develop the first National Action Plan towards gender equality currently. The EU wrapped up its 'Gender Equity and Empowerment of Women in Lebanon' in early 2017, which has laid grounwork towards the adoption of a quota system for women in the country.
		Institutions	National Commission for Lebanese Women
		1989 – CEDAW	Libya signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1989.
C	Libya	2011 - 2013 – Interim Constitutional Declaration of the Government of Libya	After the end of Gaddafi's rule, the UN-back interim government (Government of National Accord) has been in charge of developing a draft constitution. Women activists in Libya are currently in the process of including substantive demands ⁸⁸ in the draft, which will be presented to the Libyan people for referendum. This Constitution will lay out the new framework for gender equality legal tools and policy environment in the coming years.

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Libya Women's Demands in the Constitution (UNDP-led Cairo consultations). (2017)

		2006 – CEDAW	Montenegro signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2006.
*		2007 – Law on Gender Equality	The first Law on Gender Equality was adopted in July 2007. The Law on Amendments to the Law on Gender Equality was adopted in June 2015, in line with international specifications of the UN, the EU, and the Council of Europe.
	Montenegro	2008 – Action Plan to Achieve Gender Equality in Montenegro – PAPRR	This document was drafted in the context of the accession of Montenegro to the EU, based on CEDAW. Action Plan is updated every 4 years, and out of the critical areas covered in Beijing Declaration, Montenegro has opted for 9.
		Institutions	The Ministry of Human and Minority Rights The Department of Gender Equality Affairs
			The Department of Gender Equality Alians
		1993 – CEDAW	Morocco signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
		2011 – Constitution of the Government of Morocco	Article 19 establishes that men and women should enjoy equal rights and freedoms in all civil, political, economic, social, cultural and environmental matters.
	Morocco	2013 – IKRAM	The Government Plan for Equality was developed by the Government of Morocco along with key stakeholders
		Institutions	The Ministry of Human Rights
			The Ministry of Family, Solidarity, Equality and Social Development
		1985 – CEDAW	Tunisia signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985. However, in April 2014, Tunisia officially lifted key reservations on the CEDAW.
*	Tunisia	2014 – Constitution of the Government of Tunisia	The new constitution adopted in January 2014 includes strong protection for women's rights: Article 21 confirms equality of rights and duties; Article 34 guarantees women's representation in all elected bodies; and, Article 46 ensures protection of human rights.
		2015 - 2018 – Gender Equality Promotion Programme in Tunisia (EU-Tunisia)	The financing agreement of the EU-Tunisia programme was signed in April 2015. It aims to contribute to achieving gender equality in Tunisia by reducing inequalities at national, regional and local levels.
		Institutions	The National Council of Peers for Equality and Equal Opportunities between Women and Men Ministry of Women, Family and Children

7. Conclusion

The Gender Assessment identifies and expounds on both the explicit and implicit gender and socioeconomic issues that could be addressed through the Child Project 2.1components. The findings from this Assessment also form the basis for the Gender Action Plan, which will specify the Child Project 2.1's desired gender results, corresponding actions, indicators, timelines, responsible parties and budget allocations.

A gender-aware, inclusive and participatory approach to ecosystem-based adaptation can as a minimum 'do no harm', with potentials to contribute significantly to gender equality, social inclusion and community ownership, through gender-responsive project activities and policies ('do good'). As gender equality becomes crucial in the work of the Global Environmental Facility, Green Climate Fund, the UN Framework Convention on Climate Change, UN Environment as well as many donor agencies, the proactive gender approach of this project, if implemented effectively, has the potential to become a good practice to shed light on other projects promoting the sustainable management of natural resources and climate resilience in Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia, the Mediterranean, Western Balkans, and MENA region, as well as globally.

See Gender Action Plan from p. 25.

8. Gender Action Plan

	MEDITERRANEAN SEA PROGRAMME: ENHANCING ENVIRONMENTAL SECURITY					
Programme Objective			environmental str	esses affecting the esilience and wate	oon priority actions to reduce the nee Mediterranean Sea and its coas er security, and improving the hea estal population	tal areas,
Programme	e Component 2:		Enhancing Su	stainability and C	limate Resilience in the Coastal Zo	one
Child F	Project 2.1		Mediterranean Coasta	l Zone Climate Re	silience, Water Security and Habit	at Protection
Project Objective	Gender-respor Objective-lev Indicators	/el	Gender Baseline (To be Addressed)	Gender Targets and Monitoring Milestones	Means of Verification (Evaluation of Gender- Mainstreaming Progress)	Assumptions and Risks
Enhancing sustainability and climate resilience in coastal zones	Qualitative and empirical analysis project impact on gender relations in countries, at site-specific contexts: particularly gender inclusion in environmental demaking and governance, coas and water manages strategies and release	r- cision- tal ement	Given that most countries lack comprehensive ICZM and water management strategies, gender relations in coastal areas are implicated both with the differential structure affecting economic inclusion (low female labour participation rates, high youth unemployment, for example) and social norms, as well as	Gender-inclusive and participatory process in developing ICZM and IWRM strategies Gender-responsive policy inputs in ICZM and IWRM strategies, based on consultative	Meeting minutes Documentation of exchange between key gender stakeholders and CP 2.1 executing agencies Gender workshops within stakeholder consultation process Gender specialist to ensure gender-responsive ICZM and IWRM policies	Will require thorough understanding of gender issues at administrative and executive levels of the government partners, to have these key institutions on board and design genderaware policies (this may necessitate capacity-building to equip potential gender

policies; and, overall socioeconomic effects of improved environmental security, climate resilience and management strategies in the region	impending environmental consequences of mismanagement of natural resources and climate shocks	process and existing data/research, with clear mandates, responsible parties, executing strategy and means of verification	Review of policies both internally and externally, to understand impact on gender relations in project context Lessons-learnt report on gender mainstreaming and ICZM, which will also address the existing lacuna on this particular strand of literature, for information dissemination, future projects and identification of good practices for this sector	stakeholders in the development of natural resource management policies) Sustained political support and will to implement these policies
COMPONENT 1: COASTAL ZONE MANAGEMENT				

OUTCOME 1 (PROJECT OUTCOME 4): Coastal zone sustainability in beneficiary countries enhanced through the expanded compliance with the ICZM protocol and the adoption of national ICZM strategies, coastal plans and instruments, and improved gender equality

	Outcome Indicators	Gender Baseline (To be Addressed)	Gender Targets and Monitoring Milestones	Gender Action Points	Means of Verification (Evaluation of Gender Mainstreaming Progress)
1.	Number of additional countries where the ICZM protocol ratification process is underway or completed, or implementation	Policy-level disparity between men and women: since decision-making power within coastal and water management and governance structures are informed by the complex variety of local and social institutions of the Mediterranean – tangible and interactive processes to involve women and other	o Devise/revise coastal and water management plans to lay out clear gender components, with training provided to local governance bodies, NGOs, and target groups on the importance of	Engage Gender / Social Development Consultant to design and conduct gender- sensitive stakeholder consultations, and execute the Gender Action Plan	 ✓ Key Informant Interviews with local target groups on gender sensitivity ✓ Focus group discussions with NGOs working on gender rights, local gender equality lobbying groups, trade unions, workers' associations, decentralised government bodies to

advanced	vulnerable stakeholders must be	implementing the	Develop gender	identify needs and interests
	initiated at the very outset.	same	training modules on ICZM, IWRM and	of each demographic, as well as to map gender
	Time poverty:	o Host gender-	coastal livelihoods for	relations in site-specific
	Women, and adolescent girls,	responsive	capacity-building	contexts
	particularly in the MENA region,	stakeholder	purposes, as well as for	
	disproportionately shoulder the	consultations and	good practices	
	burden of household water	institutional mapping at	compilation for future	
	provision in rural areas. 90 This	both vertical and	endeavours	
	leads to a phenomenon called	horizontal levels of hierarchy to identify		
	'time poverty', defined as a situation where a certain	potential gender		
	person's time is inflexible,	mainstreaming		
	consumed by non-remunerative	partners, as well as to		
	and non-productive tasks,	involve high-level		
	perpetuating their absence from	government bodies in		
	decision-making and raising the	the process		
	opportunity costs for other	(crucial for garnering		
	profitable pursuits. With	consent for		
	depleting water resources, these	programmatic gender budgeting for the		
	demographics may be faced altered time-use patterns,	Action Plan activities)		
	particularly more time spent in	/totion r lan activities)		
	collecting domestic water.	o Address time poverty	Gender workshop	✓ Number of male and
		through coastal and	organized with engaging	female participants
		water management	activities to raise	disaggregated by age and
		plans that incorporate	awareness	household head
		affirmative action	(methodological part of	
		stances to assuage	the Action Plan	

time pressures on

process), within the

Beyond Scarcity: Water Security in the Middle East and North Africa. World Bank. (2018)

			women and other marginalised groups o Sensitize participants and stakeholders (both women and men) on the difference between nominal (just attendance) and empowering (interactive, where voices are heard) participation	larger consultations (one per site)	
1.2	Number of countries implementing comprehensive ICZM, including coastal zone use capability mapping	Gender-exclusion at different stages of the policy/project cycle: involving women and men in a gender-balanced process from the design stage in ICZM, IWRM and capability mapping is more likely to yield continued results for project outcomes throughout the project cycle, versus involving them in later stages.	 Involve a minimum 40% of women in the technical groups Provision for 'gender sessions' into the modus operandi of ICZM development groups and mapping committees: these sessions should not be limited to 'just women', but should invite both men (particularly young men) and women to the table; additionally, these sessions should be a space where 	 Outcome 1.1 Action Points apply Trains select technical members how to conduct the gender sessions, and more importantly regarding the importance of these – the process has to be strictly participatory and tailored to local needs, artisanal knowledge and traditional resource use insight (Gender Consultant will be responsible) 	 ✓ Outcome 1.1 Means of Verification apply ✓ Number of men and women in technical groups ✓ Meeting minutes ✓ Number of men and women trained to hold 'gender sessions' ✓ Randomised interviews with different members of technical groups to gauge whether they see any positive effects of the 'gender sessions'

			stakeholders can share success stories and address gender- specific grievances faced (50-50)		
1.3	Number of persons, reflecting gender balance, trained on integrated approaches, ICZM, MSP, and adaptation to climate variability and change	• Knowledge and information gap about gender, integrated approaches, ICZM, MSP, and adaptation to climate variability and change: As the literature review for this gender assessment has shown, there exists a lacuna in both technical expertise on gender and coastal issues, as well as gendersensitive analyses of the issues facing the Mediterranean region. Through genderbalanced and genderresponsive participatory and consultative methodologies, knowledge, empirical data and information on gender-specific resource use pattern, time burdens and poverty, gendered roles and access will be accumulated, using which scaling up of gender-informed policies can be pursued (both in this project and future endeavours).	Outcome 1.2 Gender Targets and Monitoring Milestones apply	 Outcome 1.1 Action Points apply Collaborate with knowledge management expert to consolidate information, data and research generated from these activities – producing accessible reports and collating empirical information for potential data philanthropy (Gender Consultant will be responsible) 	 ✓ Outcome 1.1 Means of Verification apply ✓ Knowledge products on gender and ICZM, water resource management, and coastal climate change adaptation and mitigation ✓ Dedicated gender 'tab' on knowledge sharing platform ✓ Resource lists and annotated bibliography compilation

1.4	Number of persons involved in awareness raising activit	Awareness raising for gender mainstreaming: The Mediterranean faces a plethora of environmental challenges with socioeconomic repercussions, particularly on gender relations. Awareness-raising on gender justice and environmental change, as well as coastal zone issues and their socioeconomic impacts, is crucial for kickstarting the gender mainstreaming conversation in the region.	within the training modules, stakeholder consultations and gender workshops will be necessary to question stereotypes, values and norms, and mechanisms that	 Outcome 1.1 & 1 Action Points app Combine the use social media, consultations, and workshops to devawareness-raisinactivities 	of Verification apply of ✓ Knowledge products on gender and ICZM, water resource management, and coastal climate change
		COMPONENT 2:	MANAGEMENT OF COAS	TAL AQUIFERS	
	OUTCOME 2 (PROJECT OUTCOME 5): Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by ground water-related coastal habitats				
_	Outcome ndicator	Gender Baseline (To be Addressed)	Gender Targets and Monitoring Milestones	Gender Action Points	Means of Verification (Evaluation of Gender Mainstreaming Progress)

ANNE P LIST OF NATIONAL STA E OLDERS

National sta ehole	lers
AL ANIA	 Ministry of Tourism and Environment National Environmental Agency National Coastal Agency National Agency of Protected areas Ministry of Urban Development Ministry of Agriculture and Rural Development Ministry of Infrastructure and Energy KESH - Albanian Power Corporate Agency for the Management of Water Resources River basin agencies Ministry of Health Institute of Public Health Shoqata per Zhvillim Mediatik (Association for Media Development) Shoqata Eko-Alb (The Eco-Alb Association) MMPAU-zonat e mbrojtura (MMPAU-protected areas) Shoqata Miqesia Ulez (Friendship Association from Ulez) Water Resources Management Agency (formerly Technical Secretariat of National Water Council) Albanian Geological Survey Academic institutions and Research Centres NGOs (INCA, REC, APAWA, Ecolëvizja, Diving Federation)
ALGERIA	 Ministry of Environment and Renewable Energy Ministry of Housing, Urban Affairs and Cities National Agency for Territorial Development and Attractiveness National Agency of Dams and Transfer National Agency for Climate Change National Tourism Development Agency National Hydric Resources Agency Urban Agency in charge of the Protection and Promotion of the Littoral and tourist areas of the wilaya of Algiers National Agency for the Promotion and Rationalization of the Use of Energy Algerian Space Agency National Center for the Development of Biological Resources National Commissariat of the Littoral Directorate General of Forests Directorate of Urban Planning, Construction and Housing National School of Marine and Coastal Sciences (ENSSMAL) National Institute of Cartography and Remote Sensing National Soil Institute for Irrigation and Drainage Laboratory of Marine Studies National Office for the Environment and Sustainable Development Directorate General for the Environment and the Sustainable

	b. National Observatory of the Environment and the Sustainable Development
	c. National Agency for Climate Change
	20. National Meteorological Office
	21. National Office of Statistics
	22. Ministry of Water Resources
	23. Directorate of Studies and Hydraulic Facilities
	24. Directorate of Mobilization of Water Resources
	25. Directorate of Drinking Water Supply
	26. Directorate of Agricultural Hydraulics
	27. Directorate of Sanitation
	28. Desalination Directorate
	29. National Agency of Hydraulic Resources
	30. Algerian Waters
	31. National Office of Irrigation and Drainage
	32. National Office of Sanitation
	33. National Agency of Dams and Transfers
	34. National Agency for Integrated Water Resources Management
	35. Ministry of Agriculture, Rural Development and Fisheries
	36. Ministry of National Defence
	37. Ministry of Energy
	38. Ministry of Industry and Mines
	39. Ministry of Housing, Urban Planning and the City
	40. Ministry of Tourism and Crafts
	41. Ministry of Interior, Local Authorities and Territorial Planning
	42. National Electricity and Gas Company
	43. National Office of Sanitation
OSNIA AND	1. Ministry of Foreign Trade and Economic Relations of Bosnia and
ER EGOVINA	Herzegovina
	2. Ministry of Environment and Tourism
	3. Hydro Engineering Institute of the Ministry of Agriculture, Water and
	Forestry
	4. Environmental Protection Department of the Ministry of Foreign Trade
	and Economic Relations
	5. Ministry of Transport and Communications
	6. Ministry of Health
	7. Adriatic Basin Water District Agency
	8. Federation of Bosnia and Herzegovina, Herzegovina-Neretva Canton
	9. Municipality of Neum
	10. Federal Geological Survey Bosnia and Herzegovina
	11. Geological Survey of the Republic of Srpska
	12. Ministry of Foreign Trade and Economic Relations of Bosnia and
	Herzegovina
	13. Federal Ministry of Environment and Tourism
	14. Federal Ministry of Agriculture, Water Management and Forestry
	15. Federal Ministry of Energy, Mining and Industry
	16. Federal Institute for Hydrometeorology of Bosnia and Herzegovina
1	17 Federal Administration for Inspection Affairs of Posnie and Harzagovine

19. Federal Statistics Institute

17. Federal Administration for Inspection Affairs of Bosnia and Herzegovina

18. Federal Public Health Institute of Bosnia and Herzegovina

	20. Ministry of Agriculture, Forestry and Water Management of Republic of
	Srpska
	21. Hydrometeorological Institute of Republic of Srpska
	22. Institute for Health of Republic of Srpska
	23. Ministry for Spatial Planning, Construction and Ecology of Republic of
	Srpska
	24. Ministry of Health and Social Welfare of Republic of Srpska
	25. Public Health Institute of Republic of Srpska
	26. Administration for Inspection Affairs of Republic of Srpska
	27. The Water Agency for Sava River Basin
	28. The Water Agency for Trebišnjica River Basin
	29. The Agency for Water Area of the Adriatic Sea (Mostar)
	30. Karst Management Centre in Trebinje
	31. Public Company National Park Una
	32. Public institution "Vode Srpske" Bijeljina
	33. Hydro Engineering Institute of the of Civil Engineering Faculty in
	Sarajevo
EG PT ¹	1. Coastal Zone Management Department of the Egyptian Environmental
	Affairs Agency (EEAA)
	2. Ministry of Water Resources and Irrigation
	3. Ministry of Planning, Monitoring and Administrative Reform
	4. National Committee to follow up on the implementation of the SDGs
	5. National Steering Committee for ICZM
	6. National Council for Climate Change
	7. Ministry of International Cooperation
	8. Academic institutions and Research Centres
	9. Central Department for the Integrated Management of Coastal zones
	10. General Organization for Physical Planning, Ministry of Housing
	11. Shore Protection Authority (SPA), Ministry of Water Resources and
	Irrigation
	12. Coastal Research Institute (CoRI), Water Research Center, Ministry of
	Water Resources and Irrigation
	13. National Council for Climate Change
	14. Coastal Governorates
	15. UNDP Egypt
	16. Central Laboratory for Environmental Quality Monitoring (CLEQM -
	UNESCO C2C)
	17. NGOs (Friends of Environment and Development Association Egypt)
LE ANON	Ministry of Environment
EE THIOTY	2. Ministry of Energy and Water
	3. Ministry of Public Works and Transport
	a. Directorate General of Urban Planning
	b. Directorate General of Land and Maritime Transport
	c. Directorate General of Roads and Buildings
	4. Council for Development and Reconstruction
	5. Ministry of Interior and Municipalities
	a. Directorate General of Administrative and Local Councils
	b. Coastal Brigade Command and the Coastal Detachments
	6. Ministry of Public Health
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¹ The government of Egypt will provide updated information on national stakeholders during the inception phase of the project.

	7. Ministry of Tourism
	8. Ministry of Agriculture
	9. Ministry of Culture
	10. Ministry of Defense
	11. Academic institutions and Research Centres
	12. NGOs
	13. Order of Engineers and Architects
	14. Syndicate of Hotel Owners in Lebanon
	15. Cooperatives of Fishermen
	16. Syndicate of Fishermen
	17. Association of Lebanese Industrialists
	18. Cooperatives of Fishermen
	19. Environmental consulting firms
	20. Local communities
LI A	Environment General Authority
LI A	2. General Water Authority
	3. General Water Resources Authority
	4. Man-Made River Authority
	· ·
	5. General Company for Water Desalination6. Ministry of Agriculture, Animal and Marine Wealth
	7. National Committee for Desertification
	8. Man-Made River Water Utilization Authorities
	9. Ministry of Industry
	10. Ministry of Housing and Utilities
	11. Ministry of Local Government
	12. Ministry of Electricity and Renewable Energy
MONTENECDO	
MONTENEGRO	1. Public Enterprise for Coastal Zone Management of Montenegro
	2. Ministry of Sustainable Development and Tourism
	a. Directorate for Climate Change and Mediterranean Affairs
	b. Directorate for Spatial Planning
	c. Directorate for Environment
	3. National Council for Sustainable Development, Climate Change and
	ICZM and its Working groups for ICZM, and for Climate Change
	Adaptation and Mitigation
	4. Institute of Hydrometeorology and Seismology
	5. Ministry of Economy
	6. Environmental and Nature Protection Agency of MNE
	7. Public enterprise for Coastal zone management
	8. Institute of Marine Biology
	9. Municipality of Kotor
	10. Municipality of Tivat
	11. Municipality of Herceg Novi
	12. Ministry of Agriculture and Rural Development
	13. Directorate of Fisheries
	14. Directorate of Water management
	15. Ministry of Transport and Maritime Affairs
	16. Directorate for Maritime Affairs
	15 (1) 1 (5)
	17. Chamber of Economy of Montenegro
	17. Chamber of Economy of Montenegro 18. Geological Survey of Montenegro

19. NGOs (CEED, Green Home, Green Net, Bokobran, Expeditio, ANIMA, etc.)
20. National association of professional marine fisheries
21. National Tourism Organization of Montenegro
22. Ministry of Culture (Administration for the Protection of Cultural Properties)

MOROCCO

1. State Secretariat in charge of Water, Ministry of Equipment, Transport, Logistics, and Water

23. Secretariat for the protection of the cultural and natural heritage of the

- 2. State Secretariat in charge of Sustainable Development of the Ministry of Energy, Mining and Sustainable Development
- 3. Ministry of National Planning, Urban Planning, Housing and Urban Policy
- 4. Ministry of Tourism, Air Transport, Handicraft and Social Economy
- 5. Partnership, Communication & Cooperation Department, Ministry of Energy, Mining, Water & Environment
- 6. Regional Consultation Commission for the Littoral
- 7. ONEM (National Observatory of the Environment)
- 8. OREDD (Regional Observatories for the Environment and Sustainable Development)
- 9. CNESTEN (National Center for Energy, Science, and Nuclear Techniques)
- 10. Academic institutions and Research Centers
- 11. Ministry of Agriculture, Maritime Fisheries, Rural Development, Water and Forests
- 12. Water and Electricity Office

Municipality of Kotor

- 13. River Basins Organizations
- 14. National commission for integrated management of the littoral
- 15. High commission of Water, Forests and Combating Desertification
- 16. Agency for the social and economic promotion and economic development of the province of the North
- 17. Agency for the social and economic promotion and economic development of the province of the East
- 18. Foundation Mohamed V for Environment Protection
- 19. General Confederation of Moroccan companies
- 20. Association of Chambers of Agriculture
- 21. Federation of Chambers of Commerce, Industry and Services
- 22. Federation of Craft Chambers
- 23. Federation of Maritime Fisheries Chambers
- 24. Regional Council of Tangiers-Tétouan-Al Hoceima
- 25. Regional Directorate of the following ministries: Ministry of agriculture, maritime fishery, rural development and forests; Ministry of Land Management, Urbanism and Habitat, State secretary in charge with water
- 26. Port Authority of Tangiers-Med
- 27. Provincial associations for tourism
- 28. University Abdelmaled Saadi
- 29. University Hassan I
- 30. Regional Association of Life Science Teachers
- 31. Association for Integrated Resource Management (AGIR)
- 32. Moroccan Association for Ecotourism and Nature Protection (AMEPN)
- 33. Local fisherfolk

	34. Local women's associations
TUNISIA	Agence de Protection et d'Aménagement du Littoral (APAL)
	2. Ministry of Environment and Sustainable Development
	3. Tunisian Association for the Protection of Nature and the Environment
	4. Child Network of the Earth (Protection of the Environment)
	5. The Tunisian Association of Climate Change and Sustainable
	Development Development
	6. Ministère de l'agriculture, des ressources hydrauliques et de la pêche
	7. Academic institutions and Research Centers
	8. Ministry of Agriculture, Hydraulic Resources and Fisheries
	9. Office of Planning and Hydraulic Balance
	10. General Directorate of Water Resources
	11. Office of Inventory and Hydraulic Research
	12. General Directorate of Dams and Large Hydraulic Works
	13. General Directorate of Rural Engineering and Water Use
	14. General Directorate for the Management and Conservation of Agricultural
	Land
	15. Ministry of Energy, Mines and Renewable Energies
	16. Ministry of Local Affairs and Environment
	17. General Directorate of Environment and Quality of Life
	18. General Directorate for Sustainable Development
	19. National Agency for the Protection of the Environment
	20. Ministry of Equipment, Housing and Territorial Development
	21. Directorate of Urban Hydraulics
	22. Ministry of Development, Investment and International Cooperation
	23. Ministry of Tourism and Crafts
	24. Minister of Public Health
	25. Directorate of Environmental Health and Environmental Protection
	26. National Company of Exploitation and Distribution of Waters
	27. Tunisian Company of Electricity and Gas
	28. National Office of Sanitation

ANNE Child Project 2.1

Sco e of the acti ities in su ort of the re aration of the Damour Inte rated Mana ement Plan (IMP)

The Damour Integrated Management Plan will address the following areas and features:

- The Damour municipality and its associated coastal area
- The Damour Coastal Aquifer
- The Damour River Basin

Damour coast - Damour munici alit

The Damour municipality is located on Lebanon's coast between Beirut and Saida. It covers an area of 11 km² and is home to some 30,000 people. The mouth of the Damour River is located within the administrative boundaries of the Damour municipality. The agricultural plains surrounding Damour have been among the most important in Lebanon, and since the 1950s have produced a variety of food crops including mulberries, bananas and citrus. Agricultural activities and urbanization intensified in the early 1970s.

More than any other locality, the development of Damour was heavily affected by the Lebanese war. Inhabitants were forced to displace to other Lebanese regions or to even immigrate. The mid-nineties witnessed a partial return of Damour populations. Following the war era, the village reconstruction was carried out in an uncontrolled manner. In the beginning of this century the coastal plain and upper hills were perceived as a development tool. Considerable efforts were deployed to elaborate urban management plans aiming at preserving the available resources, notably the agricultural resources, and to put forward new physical developmental spaces for future industrial activities (UNEP/MAP/PAP, 2004).

The coastal plain of Damour, located between the highway and the sea, encompasses an area of around 1.95 km². The area within the administrative boundaries of the Damour municipality and the associated elevations are distributed as follows: at sea level (7%), 5 to 50 meters above sea level (59%), 50 to 100 meters above sea level (21%), greater than 150 meters above sea level (13%).

Natural areas are still present in Damour, including landscapes, seascapes, and the Damour river valley. These are complemented by the area's cultural and historical heritage. The coast of the Damour area is a mixture of rocky and sandy beaches which are ideal for fishing, though according to local residents, this profession has been hindered due to the lack of a port (UNEP/MAP/PAP, 2004). The beaches of Damour's coast, with an area of around 0.17 km², have endured significant illegal sand extraction activities. In fact, the width of the Damour shoreline decreased by about 25 m between the 1940s and the 1990s, equivalent to the disappearance of 0.1 km² of beaches (Bakhos, 2003), probably due to the unlawful and massive sand dredging during the civil war.

More than a million of refugees are registered in Lebanon. Refugees account for 30% of Lebanon's population, the highest concentration per capita of refugees in the world. In a country that has never implemented a national waste management system and has most of its WWTPs in development, this additional pressure represents a permanent threat to environmental security. The proposed project area of the Damour IMP still has many valuable natural resources, which can be preserved with good governance that will be fostered through the development of the plan.

The Damour Ri er asin

The Damour River, located southeast of the capital, Beirut, is a perennial river with a length of 40 km. Its watershed extends over an area of approximately 305 km², from which the river originates (Dar Al-Handasah, 1996).

The basin is bounded from the north by the upper part of Beirut river basin. From the east, by the Mount Lebanon water divide, which demarks the boundary between the Litani river basin, to the east, and Mount Lebanon river basins, to the west. From the south and southeast, it is bounded by the Awali river basin. The river flows into the Mediterranean Sea.

The altitude of Damour river basin ranges from 0 m at sea level (river mouth), to 1980 m above sea level at the top of the highest hill of the Barouk Mountain. The tributaries of Damour River have carved deep valleys and canyons along some of its stretches, with very steep slopes and some cliffs along many stream sides. The depth of the valley may exceed 700 m in many places.

Its lithological characteristics comprise both karstic (27%) and non-karstic formations (73%). Two major springs, Es Safa and Barouk, contribute to river discharge. The river is formed by the convergence of three minor rivers: Es Safa, Zeble, and el Hamam. The average annual discharge, recorded for the years 1992-1993 and 1994-2001, was about 100 million m3/yr, with an average annual flow rate of 8.2 m³/s.

The vegetation cover varies widely in the basin. The natural vegetation cover is thickest in the Multaqa en Nahrain area, where oak trees cover almost completely the ground over large areas, both in the bottom of the valley and along the slopes. This cover becomes less dense moving upstream. The natural vegetation cover is negligible or nonexistent on the plateaus, ridges and hills. These areas, which make up about 2/3 the area of the basin, have been urbanized extensively.

Similar to other areas of Mount Lebanon, the precipitation rates increase with altitude. It rises from about 900 mm/yr in the mouth area, to more than 1500 mm/yr in the higher parts of the basin along the ridge of the Barouk Mountain. The average precipitation rate for the whole basin is about 1230 mm/yr.

Groundwater resources mainly exist in the Sannine Aquifer, which is protected from direct contact with the sea by the Chekka formation. In the Saadiyat area, the aquifer is recharged through infiltration of precipitation and run-off from the Damour River.

The River Basin has an agricultural profile, with bananas and vegetables being the main cultivations. In this regard, the Damour River is of socioeconomic significance as it is used for the irrigation of the agricultural coastal plains. Two dams, upstream and downstream, were constructed to divert water for irrigation.

The overexploitation of river water by upstream users leads to downstream water shortages, especially during the summer season. In turn, this affects downstream agricultural activities and induces conflicts between the Damour Municipality and upstream users, given also the lack of proper legislation for water allocation. A rough approximation of the Water Exploitation Index, using solely abstraction data for the Damour Municipality, gives values ranging between 10 and 20%, depending on annual precipitation levels. This reveals that there are pressures exerted on water resources, even without taking into account abstractions from the other municipalities of the area. Moreover, environmental pressures upstream affect river water quality which in turn can adversely affect crop production in the downstream plains.

A 2003 report (MoE/ELARD) highlighted the different environmental pressures in the Damour River Basin, which include disposal of untreated sewage and effluents from most villages, including restaurants and other similar facilities, industrial wastewater, used oils from gas stations, farm waste, and use of pesticides and fertilizers.

Groundwater is the main source of drinking water supply in the area. Only in the village of Damour, there are 64 public and private wells. The groundwater exploitation pattern has led to the degradation of the quality of water resources in the area. Water quality measurements have revealed an increasing trend in the levels of chlorides over the years (1990-2003) in the water samples taken from the public wells of the BWA, which confirm seawater intrusion. Water samples analyzed from municipal and private wells in the area

further confirmed seawater intrusion, as chloride and TDS levels were found to be high, exceeding the Guidance Value and the Maximum Admissible Value of the MOE, and ranging between 20 to 1240 mg/l and 239 to 1850 mg/l, respectively.

Around 80% of the total population of the River Basin is connected to the public water supply system. By estimate, distribution network losses range between 25 and 50% during the winter and 45 and 61% during the summer. This is comparable to the general situation in Lebanon concerning water losses.

The agricultural sector depends mainly on the Damour River, in addition to few artesian wells that are being used for irrigation. Results confirmed the overexploitation of the river water and the wells, when comparing actual water consumption values with theoretical ones. The highest level of water consumption occurs during the summer season; inefficient irrigation techniques are being used.

The main authority responsible for the management of water resources in the Damour River Basin is the Ministry of Energy and Water (MEW). The MEW is responsible for setting the planning framework for sustainable water management at the river basin level. MEW has planned to construct a major dam in the Damour River for inter-seasonal storage, but the project has not yet been implemented.

The Beirut and Mount Lebanon Water and Wastewater Establishment (BMLWWE) is responsible for supplying potable water to its subscribed customers. While the Damour Basin falls within its jurisdiction, groundwater from Damour is pumped to supply water to Beirut but apparently without adequate consideration of safe yields; groundwater salinity has been increasing.

The Ministry of Environment (MOE) is the authority responsible for controlling sources of pollution; however, at present it has limited capacity to monitor the numerous environmental violations within the basin. The Ministry of Public Health (MPH) also monitors the safety of drinking water. The same applies for local municipalities. In addition, the Damour municipality operates groundwater wells to supply potable water to the Damour village.

The Damour coastal aquifer



Figure 1 Location and extent of the Damour Coastal Aquifer, along with indications of approximate locations of submarine groundwater discharges on the Lebanese coast

The Damour Coastal Aquifer serves as one of the three main water sources for Beirut and its suburbs, following the complete salinization of the capital's main aquifer in the 1960s (Daher et al 2011). In 2004 it was estimated that up to 80% of the groundwater extraction is to serve as drinking water for the capital and its suburbs (CAMP, 2004). It is also an important source of water for the region's irrigated agricultural fields several smaller and for municipalities in the region, including the Damour municipality (Figure 1). The aquifer which is of Cretaceous age, is karstic in nature, with an extent of about 450 km². The annual renewable groundwater reserves of the Damour Coastal Aguifer are estimated at 10.5 hm³ and the aguifer is known to have submarine groundwater discharges (UNESCO-IHP 2012). The Beirut Water Authority is responsible for the management of the aquifer.

The information gathered on the Damour aquifer during the MedPartnership project (Figure 2) indicates an overall high level of concern for salinization and a medium level of concern regarding 'dependency for domestic uses.'

Figure 2 Findings of the analysis of the main coastal aquifers in Lebanon undertaken in the MedPartnership (UNEP/MAP and UNESCO-IHP, 2015)

	trients Oth Pollu	ner De endenc fo tants Domestic Uses	Salini ation
Damour			

Level of	Very low	Low	Medium	High
concern				

A recent study performed to separate baseline conditions from anthropogenic impacts in the Damour aquifer (Khadra and Stuyfzand, 2014) revealed the spatial distribution of groundwater bodies (hydrosomes). The following hydrosomes were identified and shown on a hydrochemical map: (1) Mountainous limestone water, (2) shallow coastal plain water, (3) Damour River bank-filtrate, and (4) mixed hydrosomes composed of freshwater from the limestone mountains, fresh river bank-filtrate and intruded saltwater of the Mediterranean Sea. The dominant hydrochemical facies was (sub)oxic, calcareous and salinized, indicating a very low reduction capacity of the aquifer system, strong dissolution of dolomitic limestone and clear traces of seawater encroachment.

The baseline groundwater quality as established for the above mentioned three unmixed hydrosomes is typical for a coastal dolomitic limestone aquifer showing fresh, (sub)oxic CaHCO3 water without base exchange due to fresh or salt water intrusion. After dropping salinized and polluted facies in determining NBCs, no diversity was revealed in hydrochemical facies, and hence the determined baseline was the same at both the hydrosome and facies levels. Most dissolved constituents have an intermediate position compared to four European Union reference aquifers. Closer to the shoreline, saltwater intrusion (from the Mediterranean Sea) yields a salinized facies with mostly B3CaCl— water type. However, the fraction of seawater has not exceeded 10–20% yet, which classifies the system as being at an early stage of salinization. This can be explained by a relatively late start of excessive pumping (since 1991), high productivity of the karstic aquifer system, and the role of the Damour River in providing induced recharge to its nearby wells, especially the Mechref village. A limited anthropogenic input, mainly from urban influences and agrochemical applications, also affects the system, but its minor influence is overruled by the impact of saltwater intrusion.

The study further indicates that no recharge contribution exists via lateral groundwater flows from inland higher mountains, contrary to what was previously thought by others (Khadra and Stuyfzand, 2014). In addition, the lack of typical downgradient hydrochemical patterns (in oxidants, pollutants and strontium maturity index) confirms the local origin of recharge to the system. This fact stresses the importance to keep current urbanization limited (\approx 12%), and to refrain from intensification of agriculture, which would significantly affect groundwater potentials.

It was further revealed that the Damour aquifer generally has a relatively long response time of groundwater levels to rainfall inputs (Khadra, 2017). This indicates that conduit quickflow is scarce.

Worldwide, these systems are subject to quality deterioration due to a multitude of anthropogenic impacts and subsequent saltwater intrusion (SWI). Khadra (2017) concludes that in Lebanon as a particular case, more options of water buffering are urgently required. River bank filtration forms a forgotten but strong candidate of managed aquifer recharge (MAR) application to be added to the Lebanese national water strategy. Aquifer storage and recovery (ASR) in alluvial aquifers having nearby recharge sources (e.g. from rivers) also seem to be an attractive option. In addition, further research is needed to investigate the feasibility of utilizing other sources for recharge, for instance by harvesting rainwater, urban stormwater, or even treated effluent water, where rivers are far away or have poor water quality.

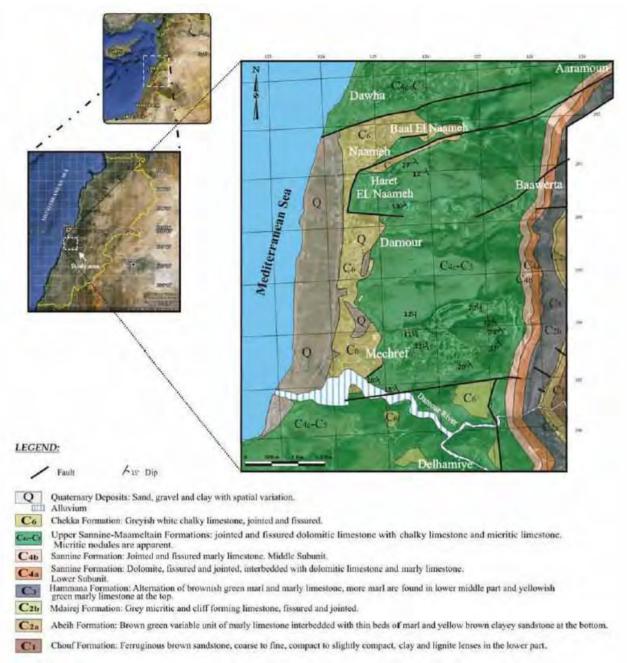


Figure 3 Geological map of the Damour area (modified after Khadra 2003).

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Annex R

Reports of stakeholders consultations for CP2.1

(ATTACHED HEREWITH)













The MedProgramme

Child project 2.1: Mediterranean coastal zones: climate resilience, water security and habitat protection

Report of the 1st sub-regional preparatory consultations Tivat, Montenegro, September 26th, 2017

> PAP/RAC Split, October 2017

Report of the 1st sub-regional preparatory consultations (Tivat, Montenegro, 26th September 2017)

Background information

- 1. With its wide scope and large Global Environment Facility (GEF) grant of 45 million USD approximately, the Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security, represents the largest International Waters GEF-funded efforts implemented by the UN Environment/MAP and one of the biggest multi-focal area Programmes ever approved by the GEF. The MedProgramme has been endorsed by eight GEF eligible Mediterranean countries, namely: Albania, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. The MedProgramme has seven Child projects spread among its four Components. These seven individual yet interlinked projects aim at achieving large-scale benefits for the global environment. Following the concept approval in 2017, efforts are now underway to prepare the documents of the Child projects in view of their submission to GEF in spring 2018. The present consultations were organized in the framework of the preparatory activities for the Child Project 2.1.
- 2. The main objectives of these consultations were: to present the MedProgramme Child Project 2.1; to assess the needs related to the Child Project objectives; and to present and discuss demonstration pilot opportunities. The Agenda of the consultations is provided in Annex 1 of this report. The consultations were organized back-to-back with the Coast Day celebration, this year hosted by Government of Montenegro, under the high patronage of Mr. Filip Vujanović, President of Montenegro and President of the National Council for Sustainable Development, Climate Change and Integrated Coastal Zone Management. These initial sub-regional preparatory consultations were held in Tivat, Montenegro on the 26th of September. The meeting was chaired by Mr. Lorenzo Galbiati, UN Environment/MAP Project Manager.

Attendance

3. The meeting was attended by 15 participants, including representatives of the Coordinating Unit for the Mediterranean Action Plan (UN Environment/MAP); Priority Actions Programme Regional Activity Centre (PAP/RAC); Plan Bleu (PB/RAC); Global Water Partnership Med (GWP-Med); the Albanian National Environmental Agency; the Bosnia and Herzegovina institutions (Ministry of Trade and Economic Relations and Hydro Engineering Institute); the Montenegrin institutions (Ministry of Sustainable Development and Tourism and Public Enterprise "Morsko Dobro"); as well as by consultants of the UN Environment/MAP, PAP/RAC and the BP/RAC. The full list of participants is provided in Annex II.

Opening of the meeting

4. The meeting was opened at 9:30 a.m. by Mr. Lorenzo Galbiati, UN Environment/MAP Project Manager, who welcomed the participants in the name of UN Environment/MAP. Ms. Željka Škaričić, PAP/RAC Director, greeted the participants on behalf of PAP/RAC and expressed her high expectations of this new GEF programme in the Mediterranean. The participants were invited to introduce themselves.

Setting the scene

5. Mr. Galbiati presented the background to the MedProgramme and the main achievements of the previous GEF investments in the region, including the Mediterranean Transboundary Diagnostic

Analysis (1997), SAP-MED (1997) and SAP-BIO (2003), as well as the MedPartnership (2009 – 2015) and the ClimVar & ICZM (2012 – 2015) projects. He reminded the participants of the National Action Plan (NAP) process and the EC Horizon 2020 Initiative. After presenting these regional initiatives, Mr. Galbiati spoke about the national initiatives, funded by the GEF in the three countries:

- Albania (Buna/Bojana Integrated Resources Management (IRM) Plan together with Montenegro, Management of PCBs, Establishment and planning of a new Marine Proteced Area (MPA) in Porto Palermo);
- Bosnia and Herzegovina (Management of coastal aquifers, PCB management); and
- Montenegro (Buna/Bojana IRM Plan together with Albania, Development of the Integrated Coastal Zone Management (ICZM) Strategy for Montenegro, Management of coastal aquifers and establishment of the new MPAs).

He concluded by informing the participants about the GEF decision to support the proposal made by the Contracting Parties of the Barcelona Convention and its partners to advance to the implementation phase which should be built on the above-mentioned preliminary assessments and preparatory work.

Presentation of the MedProgramme

- 6. Mr. Galbiati then presented the MedProgramme, pointing out that the MedProgramme fully reflected the priorities adopted by the Contracting Parties to the Barcelona Convention in the UNEP/MAP 2016-2021 Mid-term Strategy and other instruments, such as the Regional Climate Change Adaptation Framework and the Mediterranean Strategy for Sustainable Development 2016-2025. The MedProgramme is built on four components:
 - Reduction of Land-Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts;
 - Enhancing Sustainability and Climate Resilience in the Coastal Zone;
 - Protecting Marine Biodiversity; and
 - Knowledge Management and Programme Coordination.

In addition, these components are contributing to global benefits through the GEF Focal Areas of International Waters, Chemicals and Waste and Biodiversity. He presented the objectives of each of the components, their expected outcomes and targets. Mr. Galbiati also presented the project aims, implementing agencies, countries, funds, institutional setup and the timeline for the preparation of the Project Document. He concluded by introducing the Child Project 2.1, its partners, countries, grant amount and the expected outcomes.

Presentation of the draft logical framework of the Child Project 2.1.

7. Ms. Daria Povh Škugor, PAP/RAC Senior Programme Officer, presented the PAP/RAC's role in the MedProgramme and in the Child Project 2.1. She explained the key achievements of PAP/RAC in ICZM, emphasizing the usefulness of this tool for the new GEF programme. She reminded the participants of the main threats for the coastal zones, coupled with the climate change impacts. Ms. Povh presented the "Order of outcomes" diagram, inviting countries to define the level of maturity of coastal management in their countries. She introduced the outcomes and targets and described potential activities, as proposed by PAP/RAC. She reminded the participants about Article 18 (National coastal strategies, plans and programmes), of the ICZM Protocol as well as the presentation of the National ICZM Strategy in Montenegro during the Coast Day event. She also introduced the Coastal plan and demonstrated some of its results. The Child Project 2.1 foresees preparation and implementation of the ICZM Strategies, plans and approaches in at least three countries. Ms. Škugor reminded the countries that their demand for these activities was of the utmost importance. She also presented the activities that may help in capacity

building and in awareness raising. Finally, she listed several issues for the discussion, as well as the selection criteria that should assist in taking decisions on the activities and locations for onthe-ground demonstrations in the Child Project 2.1. She introduced the first steps to be implemented, including a questionnaire that would be distributed in the project countries aiming to capture the latest state-of-the-art in ICZM. The questionnaire was briefly presented by Mr. Brian Shipman, PAP/RAC expert, who emphasized the importance of reflecting the most current information in the project baseline, to ensure that the right activities would be implemented to achieve the expected results of the future project.

- 8. Mr. Dimitris Faloutsos, GWP-MED, presented the Integrative Methodological Framework (IMF) for coastal, river basin and aquifer management. The Framework was developed by the present partners of Child Project 2.1 in the previous GEF project – the MedPartnership – and tested in the Buna/Bojana IRM Plan. The IMF provides guidelines on how to further integrate management practices, or how to "integrate the integrated", taking the "source to sea" approach. He presented the findings of the IMF document through the practical case of Buna/Bojana. Taking the audience step by step, he guided participants through the application of the IMF approach, from establishment, analysis and futures, setting the vision, designing the future and finally realizing the vision. He explained all the challenges the team met and overcame during the preparation of the Buna/Bojana IRM Plan. Finally, he described how priority actions were established for 2020, with the corresponding measures, specific objectives and the general objectives. Questions were raised about the main lessons learned in the process, and Mr. Faloutsos pointed out that the institutional capacities of a country largely determined the project achievements; the importance of the availability of information, documentation and data; and finally, the importance of defining the appropriate boundaries. With respect to this final point, although the ICZM Protocol for the Mediterranean uses administrative boundaries, there is a need to consider each issue individually and set boundaries accordingly, applying an ecosystem or river basin approach when appropriate. In the discussion that followed, the participants agreed that the countries that ratified the ICZM Protocol should have the priority for the implementation of the demonstration projects on the ground.
- Mr. Antoine Lafitte, PB/RAC, presented the methodologies and tools that Plan Bleu undertook to support preparation of the ICZM strategies and plans. Plan Bleu has an important role in observation of the Mediterranean coast for the MAP. Monitoring and observation mechanisms and networks are part of the ICZM Protocol, being the topic of its Article 16. For observation, the role of indicators is one of the key ones. Mr. Lafitte presented the Climagine participatory method used during the preparation of the Coastal Plan in the previous GEF project, ClimVar & ICZM. He described three steps of the Climagine process in which stakeholders assist in understanding the territorial diagnosis and participate in prioritizing the issues, identifying institutions (data providers) and collecting the data. With the assistance of the stakeholders the indicators are selected that can define the sustainability of the project area. With the use of future scenarios, participants then jointly design the path to reach the equilibrium sustainability levels in future. Mr. Lafitte presented the potential Plan Bleu activities and outputs that may help in reaching the expected targets of the project and provide national benefits. Finally, he invited the participants to express their views on the proposed activities and asked for support in identifying "contact persons" relevant to: access data and technical information related to coastal monitoring/observation; identify stakeholders for the ICZM Strategy or plan, as well as identify national expertise related to indictors on climate change impacts on coastal zone.
- 10. Mr. Galbiati presented briefly UNESCO-IHP's role in the project, emphasizing the importance of the work within the ClimVar & ICZM project that resulted with The regional action plan for aquifers. The plan was widely discussed with the countries, so that the MedProgramme would be a step forward in its implementation. The Action plan contains also the measures related to the further research, systematic mapping, compliance with human activities exploiting water balance. Finally, he concluded by inviting the participants to take into consideration this important component, and to provide support to the integrated management of these resources.

11. Mr. Andrea Merla, UN Environment/MAP expert, explained some of the MAP expectations for the countries. He invited the national representatives to inform and involve the necessary individuals. He furthermore explained that the implementation of activities on the ground related to management of aquifers and groundwater would be based on recommendations agreed upon by the countries in the regional action plan for coastal aquifers established under the MedPartnership. He invited all the partners to select documents of relevance and importance for the MedProgramme, since the MedPartnership produced a large number of outputs. Mr. Galbiati proposed to participants that he would open the Dropbox to share all the documents, and this proposal was welcomed by participants.

Round table - Countries' feedback on the needs, proposals for demonstration areas, and ideas for implementation related to the proposed themes

- 12. In the round-table discussion, country representatives expressed their positions. Bosnia and Herzegovina representatives initiated the discussion stating that they need 3 weeks to discuss with different stakeholders in order to identify beneficiary activities. Mr. Senad Oprašić informed the participants that the NAP was sent to the Council of Ministers one week ago. Bosnia and Herzegovina is in the process of ratification of the Barcelona Convention amendments that would be followed by the ICZM Protocol ratification. He expressed his expectations that six months would be needed for the ratification of the Barcelona Convention amendments. As for the national contribution to the project, he pointed out that this must be defined with the Council of Ministers. Mr. Oprašić said that an assessment demonstrated that the transposition of the EU Directives in Bosnia and Herzegovina would cost about € 7.1 billion. He pointed out the importance of the Climate Change Adaptation and Low-Carbon Development Strategy for the country, amounting to USD 13 billion, and informed the participants that the total cost could be about € 20 billion. He emphasized the need to connect each output with the Sustainable Development Goals and to take into account the EU Strategy for the Adriatic-Ionian region. He informed the participants about the project in preparation that would be submitted to the EU Interreg ADRION Programme. Mr. Senad Oprašić pointed out the importance of the environmental and health issues for each country. He also suggested to enhance activities related to the integration of economic, social and environmental impacts on health issues. That has to be scope of work of any strategic documents, projects and programs, having in mind that the water and air are two mediums that most affect the human health. Finally, he informed that more consultations would be needed for Bosnia and Herzegovina to express interest for the activities related to MedProgramme. Mr. Tarik Kupusović informed about the European Environment Agency (EEA) on-going project for the six Balkan countries related to climate and water, aiming to fulfill millennium goals. He pointed out the need to avoid redundancy and to build synergies with this project to include health issues, as well as climate scenarios that investigate the quantity of water in rivers in future years. Representatives of Bosnia and Herzegovina asked for an additional 3 weeks to coordinate internally and to propose something feasible and suitable for the country.
- 13. The next country to report was Montenegro. Ms. Ivana Stojanović informed about a number of strategic documents prepared in the framework of the MedPartnershp and the Coastal Area Management Programme (CAMP) Montenegro projects, stressing the need for the country to be assisted in implementing priorities and measures identified. She proposed the following:
 - Regarding the Programme Outcomes 4 (Output 4.3.1) and 5: the proposal is to proceed with the implementation of the following priority actions of the National Strategy (NS) for ICZM of Montenegro:
 - a detailed vulnerability assessment of the coast and the sea at the selected locations out of six priority locations proposed in NS ICZM;

- o taking into account the general vulnerability assessment in the narrow coastal zone in the CAMP Montenegro project, these activities should be continued through the collection of missing data to insure accurate analysis and projections;
- o taking into account the analysis under the previous point it is necessary to develop the local ICZM plans that integrate Climate Variability and Change (CVC) and projections. This local plan should be concrete enough to insure the increase of the resilience to climate change through the application of the ICZM tools. As a positive example, the Šibenik-Knin County Coastal Plan should be used.
- Regarding Output 4.2.2, on the basis of the Action Plan of the NS ICZM, the suggestion is to develop a coastal database (a coastal observatory) aiming to insure at least:
 - o generation and collection of data for the selected ICZM priority indicators;
 - o continuous monitoring through application of these indicators;
 - o support of the ICZM coordination mechanism to ensure institutional coordination and cooperation needed for the unhindered functioning of this database.

Finally, she concluded by emphasizing the need for the capacity building related to ICZM, Marine Spatial Planning (MSP) and CVC. She pointed out that several actions coming from the national strategy relate to outcomes and targets presented. As for the on-going projects, the there is a need to consult the colleagues, particularly for the projects mentioned by Bosnia and Herzegovina representatives, since it is important to avoid overlaps, to establish synergies and identify co-financing.

- 14. The next country to report was Albania. Ms. Orjana Hanxhari thanked all the speakers, since the consultations helped to clarify the process, programme and the project. She pointed out that since there were no official representatives of Albania at the meeting, there was the need for consultations back at home. However, representatives shared their initial thoughts and ideas. They informed participants about the Draft Integrated Cross Sectorial Plan for the Coast from December 2015, still not adopted. The need was mentioned for harmonization of the strategic documents at the national level with the project, in order to avoid overlapping. Also, the need for instruments for implementation was pointed out, since there were good strategical documents in Albania, but their implementation was weak. As for future activities, both representatives emphasized the need for a participatory approach and for meaningful stakeholder identification and involvement. It was proposed to organize national consultations with a wide participation of the governmental and non-governmental organizations. The importance of such a meeting was pointed out, since it might assist in securing the best quality data and in accelerating the process of obtaining information. Also, it was proposed to build synergies between different existing projects at the regional or national level, particularly with reference to data collection. With that aim, Mr. Neritan Postoli mentioned the EEA technical report of future water use and other natural resources in the Balkan areas, including the Corine land-cover outputs that provide insight into the last 10 years of land-use change and of land cover. Both representatives from the National Environmental Agency confirmed that their agency could provide validated data, since they are mainly involved in monitoring issues, validating data and sending it to the EEA. It was pointed out that coordination with the right institutions was the asset that should be used. Finally, representatives emphasized that Albania has ratified the ICZM Protocol, and that this programme can help in implementing it, particularly in securing instruments needed to support implementation.
- 15. In the discussion that followed, the representative of Bosnia and Herzegovina proposed to establish a web platform where all data could be uploaded. Mr. Galbiati mentioned that such a platform was created during the MedPartnership, but most of the countries were not willing to provide data. It was also mentioned that some existing platforms could be expanded, such as the UN Environment project in Bosnia and Herzegovina related to the development of the information system for the three Conventions. This information system could be expanded to include data on the Barcelona Convention. The importance of information systems was particularly emphasized related to capacity building activities. The importance of networking

in the country was also emphasized, since it was of the utmost importance to find the right persons to contact. Mr. Lafitte noticed that as for the data collection, representatives of the Environment Protection Agency (EPA) from Albania were right contacts in their country, and the representatives of Albania agreed.

- 16. Country representatives asked for the possibilities to fund infrastructure from this GEF programme, but Mr. Galbiati pointed out that the aim of the technical project was to produce legal and policy reforms. It was mentioned that GEF does not invest funds in equipment, which it considers a national responsibility. It was also mentioned that one of the innovative aspects of this project was the involvement of two banks, the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). The banks will invest € 600 million in the region as a part of this programme. Participation of the EIB and EBRD in this project opens the door for discussion related to funding infrastructure projects, if these were proposed by this project. However, it is important to understand that the banks were offering loans.
- 17. The final portion of the meeting was devoted to reviewing the activities planned in the next few months leading to the submission of the project document. Representatives of the countries were reminded that the questionnaire would be disseminated very soon, and that three weeks were foreseen for its completion. The logical framework matrix will be sent for comments, proposals and ideas. Partner institutions' representatives pointed out the need of the countries for the information on the on-going initiatives, in order to avoid overlaps and to create synergies. As for the contacts in the countries, for Bosnia and Herzegovina it was pointed out that the GEF Council of Ministers had a wider scope than the GEF NFP; in Albania, the contacts were Mr. Pellumb Abeshi, GEF NFP, and Ms. Klodiana Marika, MAP NFP (particularly related to strategies), Ms. Borana Antoni, PAP NFP, and Ms. Hanxhari and Mr. Postoli. The MedProgramme meeting for all project countries was announced for January 2018, the cost of which would be covered by the UN Environment/MAP, with the understanding that there were limited resources available to organize country missions. Finally, the endorsement letters were announced and countries were asked to complete these on time.
- 18. Mr. Galbiati thanked the participants for their fruitful work and closed the meeting at 15:45. He expressed his desire to work together in this process of preparation of possibly the largest GEF programme in the region.

Annex I

List of participants

COUNTRY REPRESENTATIVES

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Annex II

Agenda of the consultations

09:00 - 09:30	Registration
09:30 - 10:00	Opening: welcome speeches
	 Lorenzo Galbiati, UN Environment/MAP Željka Škaričić, Director, Priority Actions Programme Regional Activity Centre
10:00 - 10:30	Setting the scene
	- Lorenzo Galbiati , UN Environment/MAP Presentation of the background to the MedProgramme and main achievements of the previous GEF investments in the region.
10:30 - 10:45	Coffee break
10:45 - 11:15	Presentation of the MedProgramme
	- Lorenzo Galbiati , UN Environment/MAP Presentation of the main features of the MedProgramme and of the Child Project 2.1: Mediterranean coastal zones: climate resilience, water security and habitat protection, with focus on objectives, activities, indicators and targets approved by countries and the GEF Council
11:45 -13:00	Presentation of draft logical framework of the Child Project 2.1.
	 Daria Povh Škugor, PAP/RAC Antoine Lafitte, BP/RAC Dimitris Faloutsos, GWP-MED
13:00 - 14:00	Lunch break
14:00 - 15:30	Round table - Countries feedback on the needs, proposals for demonstration areas, ideas for implementation related to the proposed themes (to be continued).
15:30 - 16:00	Coffee break
16:00 - 17:30	Round table - Countries feedback on the needs, proposals for demonstration areas, ideas for implementation related to the proposed themes.













The MedProgramme

Child Project 2.1: Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection

Report of the sub-regional consultation with Egypt, Lebanon, Libya, Morocco and Tunisia

> Rabat, Morocco 12 - 13 December 2017

MedProgramme Child Project 2.1

Report of the sub-regional consultation with Egypt, Lebanon, Libya, Morocco and Tunisia

(Rabat, Morocco, 12 - 13 December 2017)

Background information

- 1. The "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" is a six-year, USD 46 million programme financed by the Global Environment Facility (GEF) that brings together eight Mediterranean countries Albania, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia to accelerate the implementation of priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The MedProgramme is implemented by UN Environment with UN Environment/Mediterranean Action Plan (MAP) as the leading executing agency, and is composed of seven Child Projects, each one with activities designed to achieve the global benefits of the overall programme. Since the programme's endorsement by the GEF and the participating countries in October 2016, UN Environment/MAP has been working with the executing agencies of the Child Projects to prepare the individual project documents, in view of their submission to the GEF for endorsement in 2018.
- 2. The sub-regional consultation held on 12 and 13 December 2017 in Rabat was devoted to the preparation of Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection" with the participating countries of the southern Mediterranean sub-region, namely Egypt, Lebanon, Libya, Morocco and Tunisia. It was organized by the executing partners of Child Project 2.1: the Global Water Partnership Mediterranean (GWP-MED), the Priority Actions Programme/Regional Activity Center (PAP/RAC), Plan Bleu, UNESCO's International Hydrological Programme (IHP) and UN Environment/MAP. The main objectives of the consultation were to (1) review the results framework agreed upon by the GEF and participating countries; (2) discuss priority geographic areas and the activities to undertake to achieve the project sexpected outcomes and results; and (3) identify information needed to complete the project document. The agenda of the sub-regional consultation is provided in Annex 1.
- 3. Child Project 2.1 includes two sub-components. Sub-Component 1 aims to enhance coastal zone sustainability through the adoption of comprehensive national ICZM strategies, and will be executed by PAP/RAC, Plan Bleu and GWP-MED. Sub-Component 2 is devoted to the protection of coastal aquifers and groundwater related ecosystems, and will be executed by UNESCO-IHP. An overview of the context of Child Project 2.1 in the wider MedProgramme is provided in Table 1.

Table 1 Objective of the MedProgramme and key information about Child Project 2.1 and its sub-components

MedProgramme	"Mediterranean Sea Programme: Enhancing Environmental Security"		
Programme Objective	To accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations		
Programme Component 2	Enhancing Sustainability and Climate Resilience in the Coastal Zone (Child Project 2.1)		

Child Project 2.1: Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection

Sub-Component 1: Coastal zone sustainability enhanced through the adoption of comprehensive national ICZM strategies (PAP/RAC, GWP-MED and Plan Bleu)

Sub-Component 2: Protection of coastal aquifers and groundwater related ecosystems (UNESCO-IHP)

Attendance

- 4. More than 40 people attended the consultation, including the GEF Operational Focal Points (or their designated representatives) of Lebanon, Libya, Morocco and Tunisia; representatives of the five executing agencies of Child Project 2.1 (GWP-MED, PAP/RAC, Plan Bleu, UNESCO-IHP and UN Environment/MAP); focal points of the executing agencies with expertise in the domains of coastal zones and surface water and groundwater resources management in Egypt, Lebanon, Morocco and Tunisia; representatives of the UNESCO office in Rabat; a delegation from the Moroccan government; and members of the Moroccan press. The list of participants in provided in Annex 2.
- 5. The names and affiliations of the GEF Operational Focal Points, their representatives, and the focal points of the executing agencies of Child Project 2.1 are set forth in Table 2, along with an indication of their presence at the consultation. It should be noted that the focal points of Libya for UNESCO-IHP/GWP-MED, PAP/RAC and Plan Bleu were invited to participate in the consultation but were unable to attend due to the lengthy visa approval process or to safety concerns, as the case may be.

Table 2 Representatives of the participating countries, their affiliation and indication of presence at the sub-regional consultation for Child Project 2.1 in Rabat, Morocco on 12 and 13 December 2017

Country	Role	Name	Affiliation	Presence
Egypt	GEF Operational Focal Point (OFP)	Mr. Mohamed Shehab Abdel Wahab	Egyptian Environmental Affairs Agency	
	UNESCO-IHP/GWP-MED Focal Point (FP)	Mr. Taher Hassan	Ministry of Water Resources and Irrigation	√
	PAP/RAC FP	Mr. Mohamed Farouk	Egyptian Environmental Affairs Agency	√
	Plan Bleu FP	Mr. Mohamed Eissawy	Egyptian Environmental Affairs Agency	
Lebanon	GEF OFP	Mr. Tarek El Khatib	Ministry of Environment	
	Nominated representative of the GEF OFP	Mr. Adel Yacoub	Ministry of Environment	√
	UNESCO-IHP/GWP-MED FP	Ms. Samar Hijazi	Ministry of Energy and Water	√
	PAP/RAC and Plan Bleu FP	Mr. Paul Moussa	Ministry of Environment	√
Libya	GEF OFP	Mr. Mustafa Soliman	Environment General Authority	✓
	UNESCO-IHP/GWP-MED FP	Mr. Rasheed Alfiteesi	General Water Authority	
	PAP/RAC FP	Mr. Elmonji S.I. Elsamh	Environment General Authority	
	Plan Bleu FP	Mrs. Samia E. Grimida	Environment General Authority	

Country	Role	Name	Affiliation	Presence
Morocco	GEF OFP	Mr. Mohamed Benyahia	Ministry of Energy, Mines and Sustainable Development	
	Nominated representative of the GEF OFP	Ms. Nassira Rheyati	Ministry of Energy, Mines and Sustainable Development	√
	UNESCO-IHP/GWP-MED FP	Mr. Abdesalam Ziyad	Secretariat of State for Water	√
	PAP/RAC FP	Mr. El Mehdi Chalabi	Secretariat of State for Water and Environment	√
	Plan Bleu FP	Mrs. Rajae Chafil	National Environment Council	✓
Tunisia	GEF OFP	Mrs. Sabria Bnouni	Ministry of Environment	
	Nominated representative of the GEF OFP	Mr. Karim Sahnoun	Ministry of Environment	√
	UNESCO-IHP/GWP-MED FP	Mr. Heithem Nasri	Ministry of Local Affairs and Environment	√
	PAP/RAC FP	Mr. Abdelmajid Bettaieb	National Agency for Coastal Protection and Management (APAL)	
	Plan Bleu FP	Mr. Mosbah Abaza	Ministry of Local Affairs and Environment	√

Opening remarks, setting the scene and overview of the MedProgramme and Child Project 2.1

- 6. Opening remarks were made by Ms. Nassira Rheyati (Ministry of Energy, Mines and Sustainable Development of Morocco), Mr. Hassane Belguenani (UNESCO Office in Rabat) and Mr. Matthew Lagod (UN Environment/MAP), who welcomed the participants and recalled the context of the MedProgramme, namely the Mediterranean Action Plan, the Barcelona Convention, the UN Environment/MAP Mid-term Strategy 2016 2021 as well as previous GEF-financed projects undertaken in the region.
- 7. The executing partners then provided a brief overview of their roles in the execution of Child Project 2.1. UN Environment/MAP is the leading executing agency for the project and will ensure overall coordination among the executing partners as well as knowledge management and awareness raising. GWP-MED will contribute to activities on river basin management in the context of integrated coastal management plans and in coordination with UNESCO-IHP will contribute to the activities related to the conjunctive management of surface water and groundwater resources. PAP/RAC will lead efforts to prepare new integrated coastal zone management (ICZM) strategies and plans and to provide assistance to additional countries that wish to ratify the ICZM Protocol of the Barcelona Convention. Plan Bleu will support PAP/RAC in these efforts, with a particular focus on determining what is important to monitor for the implementation of ICZM activities, and furthermore proposed to prepare a conceptual framework for an observation system. UNESCO-IHP will guide activities aimed at improving the management of water resources in priority coastal aquifers, including through aquifer management plans that promote the conjunctive management of surface water and groundwater resources, studies of submarine groundwater discharges and protection of coastal habitats, in particular groundwater dependent coastal ecosystems.
- 8. Considering that one of the main objectives of the MedProgramme is to create synergies and improve the coordination of the national institutions to achieve and interdisciplinary approach for sustainable development and management of natural resources and related coastal ecosystems, particular attention was given during the discussions to the identification of national partners that could secure close coordination between the national authorities responsible for water resources and ministries of environment.

- 9. The executing partners also cited examples of their past achievements in the region, including through the MedPartnership (UN Environment/MAP, GWP-MED, PAP/RAC, Plan Bleu and UNESCO-IHP) and made reference to other projects such as the "Integration of climate variability and change into national strategies for the implementation of the ICZM Protocol in the Mediterranean" project (ClimVar and ICZM Project). All presentations from the meeting are available via DropBox at this link.
- 10. Next, UN Environment/MAP outlined the objectives of the MedProgramme and the Child Project 2.1. The MedProgramme represents the first example of a programmatic approach by the GEF in the Mediterranean, and is also the first programme to combine multiple GEF focal areas, namely International Waters, Chemicals and Waste, and Biodiversity. The global environmental benefits that will be achieved through the programme include improved management of 12.5 million hectares of landscapes and seascapes, improved management of five freshwater basins, and the disposal of 3,250 metric tons of POPs and 50 metric tons of mercury, amongst other benefits. Child Project 2.1 will contribute to these targets by enhancing coastal zone sustainability through the adoption of ICZM strategies and plans and by improving climate resilience and water security through the protection of coastal aquifers and groundwater related ecosystems. All activities will be designed to enhance gender equality.

The results framework of Child Project 2.1 and feedback from the participating countries

- 11. At this point, GWP-MED, PAP/RAC, Plan Bleu and UNESCO-IHP presented the results framework of the specific sub-components of Child Project 2.1, which documents the outcomes and targets approved by the GEF Council and the participating countries (Annex 3). The executing partners then proposed potential sites for the execution of activities to achieve these outcomes and targets, based on priorities established through the MedPartnership and the ClimVar and ICZM Project or through subsequent discussions with country representatives prior to the development of the Programme Framework Document of the MedProgramme.
- 12. Following the presentation of the results framework and potential sites for activities, the floor was given to the GEF Operational Focal Points (or their designated representatives) and the focal points of the executing partners for feedback and discussions. The results of these discussions, including priority areas for intervention and recommendations for activities, are set forth below. All participating countries informed the audience that they will address an official written correspondence highlighting their priorities about selected areas. It was agreed that these correspondences should be sent to UN Environment/MAP if possible by 31 December 2017. Correspondences should be addressed to Mr. Gaetano Leone, Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat (gaetano.leone@unep.org) with copy to Mr. Lorenzo Galbiati, Project Manager (lorenzo.galbiati@unep.org).

Egypt

- 13. In terms of ICZM, representatives of Egypt recommended to:
 - Update the national ICZM strategy including climate change impacts, and to establish an interministerial committee;
 - Analyze the national environmental and water laws in relation to the ICZM Protocol (since both laws will be updated in the near future).
- 14. In terms of coastal aquifers, representatives of Egypt confirmed that the priority coastal aquifer is the North West Coast aquifer. They also requested:
 - To undertake a joint ICZM and coastal aquifer management plan, focused on the North West Coast aquifer.

- Assistance for evaluating groundwater recharge through the implementation of monitoring plans (sea level, precipitation, groundwater level, seawater intrusion, etc.);
- Demonstration of monitoring equipment (including the possibility of purchasing monitoring equipment).
- 15. The national counterparts for the activities of Child Project 2.1 in Egypt will be the Ministry of Water Resources/National Water Resources Center, the Ministry of Environment, and the Egyptian Environmental Affairs Agency.

Lebanon

- 16. In terms of ICZM, representatives of Lebanon recommended to:
 - Support implementation of the ICZM Protocol through updating of draft national ICZM strategy and the establishment of an ICZM Unit;
 - Develop a coastal plan and awareness raising campaign on ICZM, taking into account the impact of refugees on ICZM planning and strategy.
- 17. In terms of coastal aguifers, representatives of Lebanon:
 - Confirmed that the priority coastal aquifer is the Tyr Saida aquifer and that the boundary remained to be defined;
 - Requested assistance in obtaining groundwater monitoring equipment, tools and materials;
 - Highlighted that submarine groundwater discharge is an important feature in coastal areas.
- 18. Representatives of Lebanon furthermore indicated a need for assistance with:
 - Data collection from open access sources;
 - Training on hydrological modelling, land use change indicators, and on groundwater modelling;
 - GIS applications for natural resources management;
 - Obtaining high-resolution satellite images for land use of coastal zone, and training on the interpretation of these images.
- 19. The national counterparts for the activities of Child Project 2.1 in Lebanon will be the Ministry of Environment and the Ministry of Water and Energy.

Libya

- 20. The GEF Operational Focal Point of Libya acknowledged the difficult political situation in his country, and confirmed Libya's wish to remain involved in the MedProgramme.
- 21. In terms of ICZM, the representative of Libya recommended to support the development of a national ICZM strategy and the implementation of the ICZM Protocol.
- 22. In more general terms, the representative of Libya requested:
 - Assistance with capacity building and the gathering of updated scientific data required to better define baseline conditions and plan priority actions for implementation in the near future;
 - Examples of best practices, successful case studies;
 - Support for interministerial coordination;

- A clear indication of responsibilities for national focal points in Libya for PAP/RAC, Plan Bleu and UNESCO-IHP, to ensure effective outcomes of project activities.
- 23. The national counterparts for the activities of Child Project 2.1 in Libya will be the Environmental General Authority and the General Water Authority.

Morocco

- 24. In terms of ICZM, the representatives of Morocco recommended to:
 - Prepare an ICZM plan for Tetouan area and/or Al Hoceima area, including capacity building for local actors in the selected area;
 - Identify measures to assist the country in overcoming legal/policy barriers to integrated coastal zone management.
- 25. In terms of coastal aquifers, the representatives of Morocco confirmed that the priority coastal aquifer is the Nappe de Rhiss Nekkor. They also recommended to:
 - Study the water quality of the aquifer, in particular linked to pollution and seawater intrusion;
 - Develop hydrogeological modelling of the aguifer;
 - Prepare guidelines on groundwater monitoring and sampling, as well as on the use of isotopes to analyze pollution and seawater intrusion.
- 26. Representatives of Morocco furthermore indicated a need for:
 - Capacity building for national actors on monitoring of coastal indicators;
 - Support to promote best practices/case studies conducted in Morocco;
 - Technical assistance for the National Laboratory for the Environment for monitoring of coastal water quality;
 - Closer coordination between ministries responsible for coastal management on the one hand and water resources management on the other hand.
- 27. The national counterparts for the activities of Child Project 2.1 in Morocco will be the Ministry of Energy, Mines, and Sustainable Development and the Secretary of State in charge of water.

Tunisia

- 28. In terms of ICZM, the representatives of Tunisia recommended to:
 - Undertake an integrated management plan in the Golfe de Gabes, addressing the dimension of climate change risks;
 - Develop a national ICZM Strategy;
 - Establish an interministerial platform on ICZM to coordinate efforts on ICZM and adaptation to climate variability and change.
- 29. The Grombalia aquifer was mentioned as a possible site (for activities on ICZM as well as coastal aquifers). However, the representatives of Tunisia confirmed that the locations will be confirmed in an official letter by the GEF Operational Focal Point after consultation with the national authorities.
- 30. The representatives of Tunisia also indicated a need to:
 - Support monitoring and analysis;

- Build on ongoing activities, especially those led by Plan Bleu on local stakeholder involvement through the Climagine participatory approach (implemented in Kerkennah archipelago from 2013 – 2015);
- Focus on priorities identified within the national strategy and within the Mediterranean Strategy for Sustainable Development (MSSD);
- Replicate methodologies applied in the Regional Governance and Knowledge Management Project within Child Project 2.1.
- 31. The national counterparts for the activities of Child Project 2.1 in Tunisia will be: APAL, the Ministry of Agriculture and Water Resources, and the Ministry of Environment.

Information required to complete the project document

- 32. UN Environment/MAP then outlined the information that would be necessary to complete the project document, including:
 - Present situation (ICZM, coastal aquifers) and issues of concern at the national level, and at the level of the zone of intervention (zone targeted for ICZM planning, priority coastal aquifers, etc.;
 - Associated baseline projects: overview of projects (GEF and other donors) showing complementarities with project activities and expected outcomes; financial resources involved;
 - Institutional, sectoral and policy context related to coastal zone management, water management and other relevant fields;
 - Project counterparts (beneficiaries) at the national level (Ministries, agencies, institutes, etc.);
 - Consistency of project activities and expected outcomes with national priorities and plans;
 - Stakeholder mapping (identification of groups, definition of context and their expected role in the project);
 - Gender aspects: women's roles and responsibilities in coastal zone management, water resources management, etc.
- 33. UN Environment/MAP asked GWP-MED, PAP/RAC, Plan Bleu and UNESCO-IHP to first compile existing information and then work with the countries to obtain the additional elements that would be required to finalize the project document. The participating countries agreed to provide the additional information within a reasonable amount of time. A tentative deadline of 31 December 2017 for this information was requested by UN Environment/MAP, in view of preparing a first draft of the project document by 31 January 2018.

Co-financing requirements

34. The GEF requires co-financing for executing partners and for the national governments of countries in which activities will be conducted. UN Environment/MAP described the most common forms of in-kind co-financing (staff time, institutional support and related projects) and recalled that co-financing letters from the countries must be submitted along with the project document for consideration by the GEF. The participating countries agreed to the 31 January 2018 deadline proposed by UN Environment/MAP for the preparation of a draft co-financing letter.

Action items

35. In the closing of the consultation, the executing partners and the participating countries agreed to the action items set forth below. Tentative deadlines are indicated, however, these may not be feasible, especially those in December 2017.

Action	Responsibility	Deadline
Provide UN Environment/MAP with written inputs on priority areas for activities as well as main national counterparts	GEF Operational Focal Points	31 December 2017
Provide UN Environment/MAP with additional information needed to complete project document (updated baseline information on national priorities, projects and stakeholders)	Executing partners: GWP- MED, PAP/RAC, Plan Bleu, UNESCO-IHP	31 December 2017
Prepare first draft of project document for CP 2.1, including matrix of responsibilities of each executing partner and clear indication of national and regional activities	UN Environment/MAP	31 January 2018
Prepare first draft of co-financing letter and organize discussion with UN Environment/MAP	GEF Operational Focal Points and UN Environment/MAP	31 January 2018

Annex 1 Agenda of the consultation

Day 1: 12 December				
9:00 - 9:30	Registration			
9:30 - 10:00	Opening: Welcoming speeches			
	 Ms. Nassira Rheyati, Ministry of Energy, Mines and Sustainable Development, Morocco Mr. Hassane Belguenani, UNESCO Office in Rabat Mr. Matthew Lagod, UN Environment/MAP Chair: Ms. Alice Aureli, UNESCO-IHP 			
10:00 - 10:30	Setting the scene: Background on the MedProgramme and roles of the executing partners of Child Project 2.1: Mediterranean coastal zones: climate resilience, water security and habitat protection - Mr. Matthew Lagod, UN Environment/MAP - Ms. Daria Povh Škugor, PAP/RAC - Mr. Antoine Lafitte, Plan Bleu/RAC - Mr. Dimitris Faloutsos, GWP-MED - Mr. Youssef Filali-Meknassi, UNESCO-IHP Moderator: Ms. Alice Aureli, UNESCO-IHP			
10:30 - 10:45	Coffee Break			
10:45 - 11:15	Presentation of the main features of the MedProgramme and of the Child Project 2.1, with focus on objectives, indicators and targets approved by countries and the GEF Council. Objectives of the sub-regional consultation - Mr. Matthew Lagod, UN Environment/MAP			
11:15 - 12:30	u i			
	Presentation of the draft logical framework, criteria and selection of the main project sites of Child Project 2.1. - Ms. Daria Povh Škugor, PAP/RAC - Mr. Antoine Lafitte, Plan Bleu/RAC - Mr. Dimitris Faloutsos, GWP-MED - Ms. Alice Aureli / Mr. Youssef Filali-Meknassi, UNESCO-IHP Moderator: Mr. Matthew Lagod, UN Environment/MAP			
12:30 - 14:00	Lunch Break			

Annex 1 Agenda of the consultation

1					
14:00 – 15:30	Roundtable 1: Feedback from Egypt, Lebanon and Libya				
	Interventions from the GEF Operational Focal Points (30')				
	- Mr. Mohamed Abdel Wahab, GEF Operational Focal Point of Egypt				
	- Mr. Adel Yacoub, Representative of the GEF Operational Focal Point of				
	Lebanon				
	- Mr. Mustafa Soliman, GEF Operational Focal Point of Libya				
	Interventions from other country representatives ¹ (focal points of				
	PAP/RAC, Plan Bleu, GWP-Med and UNESCO-IHP) and partners (30')				
	Discussion (30')				
	Moderator: Mr. Andrea Merla, UN Environment/MAP				
15:30 - 16:00	Coffee Break				
16:00 - 17:15	Roundtable 2: Feedback from Morocco and Tunisia				
	Interventions from the GEF Operational Focal Points (20')				
	- Ms. Nassira Rheyati, Representative of the GEF Operational Focal				
	Point of Morocco				
	- Mr. Karim Sahnoun, Representative of the GEF Operational Focal Point				
	of Tunisia				
	Interventions from other country representatives (focal points of				
	PAP/RAC, Plan Bleu, GWP-Med and UNESCO-IHP) and partners (30')				
	D: (05)				
	Discussion (25')				
	Moderator: Mr. Andrea Merla, UN Environment/MAP				
17:15 – 17:30	Wrap up of Day 1				
	- Mr. Matthew Lagod, UN Environment/MAP				

Day 2: 13 December					
9:30 - 10:30	Roundtable 3: Information required to complete the project document				
	- All countries and project partners				
	Moderator: Mr. Matthew Lagod, UN Environment/MAP				
10:30 - 10:45	Coffee Break				
10:45 - 12:00	Roundtable 4: Discussion of co-financing requirements from the countries				
	for project activities at the national level				
	- All countries and project partners				
	Moderator: Mr. Matthew Lagod, UN Environment/MAP				
12:00 - 12:15	Wrap up of Day 2				
	- Mr. Matthew Lagod, UN Environment/MAP				
12:15 - 12:30	Closing Ceremony				

¹ See Table 1 below for names and affiliations.

Annex 1 Agenda of the consultation

Table 1 Names and affiliations of National Focal Points (NFP) of PAP/RAC, Plan Bleu, GWP-Med and UNESCO-IHP

Country	Role	Name	Affiliation		
Fount	PAP/RAC NFP	Mr. Mohamed Farouk	Director, Coastal Zone Management Egyptian Environmental Affairs Agency, Cabinet of Ministers		
Egypt	GWP-Med and UNESCO-IHP NFP	Mr. Taher Hassan	Groundwater Research Institute National Water Research Center Ministry of Water Resources and Irrigation		
	PAP/RAC and Plan Bleu NFP	Mr. Paul Moussa	Engineer, Department of the Protection of Natural Resources, Ministry Of Environment		
Lebanon	GWP-Med and UNESCO-IHP NFP	Ms. Samar Hijazi	Civil Engineer, Ministry of Energy and Water		
	PAP/RAC NFP	Mr. Elmonji S.I. Elsamh	Director, Studies & Environmental Impact Assessment Office, Environment General Authority		
Libya	Plan Bleu NFP	Dr. Samia E. Grimida	Cooperation and Technical Consultation Department, Environment General Authority		
	GWP-Med and UNESCO-IHP NFP	Mr. Rasheed Alfiteesi	General Water Authority		
	PAP/RAC NFP	M. El Mehdi Chalabi	Direction de la Surveillance et de la Prévention des Risques, Département de l'Environnement/Secrétariat d'Etat chargé de l'Eau et de l'Environnement		
Morocco	Plan Bleu NFP	Mme. Rajae Chafil	•		
	GWP-Med and UNESCO-IHP NFP	M. Abdesalam Ziyad	Directeur de la Recherche et de la Planification de l'Eau, Secrétariat d'Etat chargé de l'Eau		
	PAP/RAC NFP	M. Abdelmajid Bettaieb	Directeur, Agence de Protection et d'Aménagement du Littoral (APAL)		
Tunisia	Plan Bleu NFP	M. Mosbah Abaza	Ingénieur général/Sous-Directeur, Direction générale du développement durable		
	GWP-Med and UNESCO-IHP NFP	Mr. Heithem Nasri	Chef de service, Direction générale pour l'environnement et la qualité de la vie		

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Annex 3 Results framework for Child Project 2.1 of the MedProgramme

MIFIDITERRANEAN SEA	A PROGRAMME.	· FNHANCING FNVIRONMFNTAL	SECTIBITY

Programme Objective To accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations

Programme Component 2 - Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1: Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection

Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Enhancing Sustainability and Climate Resilience in the Coastal Zone	Number of hectares of landscapes and seascapes under improved management and climate resilience, taking a source - to - sea approach.	Most countries lack adoption and /or implementation of comprehensive ICZM strategies, plans and practices, and of consideration of the role of coastal aquifers in sustaining livelihoods and biodiversity and buffer the impacts of CV&C.	At least 12,500,000 hectares of landscapes and seascapes under improved management.	3 Comprehensive ICZM strategies /plans and 5 Coastal aquifer management plans adopted or in the process of adoption.	Sustained political support from countries throughout the project
Outcome 1 (Programme Outcome 4)	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions
Coastal zone sustainability in beneficiary countries enhanced through the expanded compliance with the ICZM Protocol and the adoption of national ICZM strategies, coastal plans and instruments, and improved gender equality.	1.1 Number of additional countries where the ICZM Protocol ratification process is under way or completed or implementation advanced.	ICZM protocol (not yet ratified by 4 out of 8 project countries)	ICZM Protocol ratification process under way in three additional countries and advancement in implementation documented in	Documentation related to the ratification and implementation process.	Countries willing to engage in the ratification process of the ICZM Protocol, and to take action on the ground to improve coastal

Annex 3 Results framework for Child Project 2.1 of the MedProgramme

		three additional countries with methodologies to support Protocol implementation enhanced		resources management.
1.2 Number of countries implementing comprehensive ICZM including Coastal Zone Use-Capability mapping.	Coastal Strategies/plans tested in 2 countries (MedPartnership) Integrative Methodological Framework for coastal zone, river basin and aquifer management (IMF) tested under the MedPartnership.	At least 3 countries implementing ICZM strategies, plans and approaches.	ICZM Strategy/plan related published documents, and meeting reports	Relevant authorities, and key stakeholders actively participate in the development and implementation of ICZM strategies and plans.
1.3 Number of persons, reflecting gender balance, trained on integrated approaches, ICZM, MSP, and adaptation to climate variability and change.	3 regional trainings delivered in the framework of MedPartnership and ClimVar & ICZM projects	At least 300 persons trained, reflecting gender, on ICZM, MSP and CVC adaptation.	Training materials Training reports Training feedback List of participants	Persons receiving training represent major stakeholders, relevant national government bodies, and local administrators
1.4 Number of persons, involved in awareness raising activities.	ICZM awareness raising and marketing strategy prepared	At least 1,000 persons involved in awareness raising activities on coastal resilience and sustainability.	Local and national media report on MedProgram and ICZM	Participants represent a broad spectrum of stakeholders and public opinion makers.

Annex 3 Results framework for Child Project 2.1 of the MedProgramme

Outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Output 1.1: Multi- stakeholders consultations on ICZM Protocol ratification and implementation.	Number of consultation events/meetings aiming to support ratification and implementation of the ICZM Protocol	1 regional training on legal aspects of the ICZM Protocol implemented in the framework of MedPartnership project 3 project beneficiary countries ² ratified the ICZM Protocol during the MedPartnership project.	3 Sub-regional (Adriatic, Southern and Eastern Mediterranean) trainings in support of ICZM Protocol implementation 3 national events/meetings in support of ICZM Protocol ratification.	Training materials Training reports Training feedback Consultation reports Number of ICZM Protocol ratifications	A: Countries willing to ratify ICZM protocol
Output 1.2: Inter-Ministerial Coordination mechanisms for coastal management in place	Number of countries where the structure, role and modus operandi of IMCs have been submitted for approval	No IMC or equivalent bodies exist in 7 of the project countries 1 project beneficiary country ³ adopted the IMC proposal during MedPartnership project.	IMC proposals discussed with the relevant authorities in 3 project countries	IMC proposals Meeting/Consulta tion reports	A: Countries willing to establish IMCs
Output 1.3: ICZM Strategies/plans developed and adopted	Number of countries adopting and implementing ICZM comprehensive strategies/plans	1 Strategy and 1 Plan, including corresponding reports developed and adopted in 2 project countries in the framework of the MedPartnership project 1 Climagine report developed 1 coastal risk assessments developed	3 ICZM Strategy/Plan documents submitted for adoption	ICZM Strategy/Plan documents Meeting reports	A: Stakeholders committed to the development and implementation of the ICZM strategies and coastal plans
Output 1.4: A series of training events in ICZM, MSP and CVC adaptation developed and implemented	Training package published No. of events No. of participants Participants gender ratio Post-training evaluation feedback Ratio of technical/political participants	MedOpen- virtual training course on ICZM with basic course on climate change adaptation developed and implemented once during ClimVar project	Virtual training modules upgraded MedOpen course linked with other similar courses dealing with integrated approaches Advanced virtual training course run on yearly basis	Training materials Training reports Training feedback Module accessed online Certificates issued	Persons receiving training represent major stakeholders, relevant national government bodies, and local administrators

² Out of the MedPartnership project countries, 5 beneficiary countries ratified the ICZM Protocol during the project implementation ³ Out of the MedPartnership project countries, 3 beneficiary countries established IMC's during the project implementation

Annex 3 Results framework for Child Project 2.1 of the MedProgramme

Output 1.5: Material for awareness campaigns produced	No. and type of awareness materials	Short video produced in 2014 "A good climate for change" Campaign identity and tradition	during the project implementation period Training implemented in 3 countries New promotional materials developed for awareness campaigns on yearly basis during the project implementation period	Visual, audio and on-line materials (Videos, movies, photo exhibitions) Promotional materials	Active participation of national specialists.
Output 1.6: Public Awareness Campaigns implemented Outcome 2	No. of campaigns No. of countries No. of participants Outcome indicator	Campaign developed on climate change, implemented in Tunisia 2014 Baseline	1000 persons attend or exposed to awareness raising events	Campaign reports New Ambassadors for the Coast appointed Press reports Means of	Participants represent a broad spectrum of stakeholders and public opinion makers Assumptions
(Programme Outcome 5)	Guttome maleutor	baseinie	ruigets	verification	Assumptions
Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater related coastal habitats.	Number of priority coastal aquifers and related habitats under improved conjunctive surface and groundwater management.	An inventory and preliminary assessment of all major coastal aquifers and related ecosystems already exists (MedPartnership). No aquifer specific management framework is in place in any of the littoral countries.	At least 5 priority coastal aquifers and related ecosystems under improved conjunctive surface and groundwater management.	Aquifer management plans submitted for adoption at local/national level	A: Countries and coastal zone administrators committed to the implementation of the Plan
Outputs	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Output 2.1: Detailed	Number of Coastal Aquifers	Preliminary inventory of	Reports produced for 5	Reports	A: Broad
assessments of the current state of priority coastal	Assessment Reports (including gender analysis) completed.	Mediterranean coastal aquifers and related freshwater ecosystems based	priority aquifers.	approved by the	stakeholder and national experts'

Annex 3 Results framework for Child Project 2.1 of the MedProgramme

aquifers and related coastal ecosystems, including environmental, socioeconomic, gender and legal policy aspects.		on existing information conducted as part of MedPartnership.		Steering Committee	participation to the assessment process.
Output 2.2: Sub-regional (Adriatic, Southern and Eastern Mediterranean) Conjunctive surface and groundwater management stakeholders' training modules designed and implemented.	Number of Sub-regional (Adriatic, Southern and Eastern Mediterranean) Conjunctive surface and groundwater management stakeholders' training modules designed and implemented.	Conjunctive management of surface and groundwater is new to the region. Countries lack experience in the field of freshwater management in the coastal area.	3 Sub-regional (Adriatic, Southern and Eastern Mediterranean) Conjunctive surface and groundwater management stakeholders' training modules implemented.	Sub-regional training modules reports.	A: Broad participation of countries' authorities and other multisectoral stakeholders.
Output 2.3: National Dialogues identifying potential conjunctive management solutions.	Number of National Dialogues (including gender balance) identifying potential conjunctive management solutions		5 National Dialogues identify potential conjunctive management solutions and implemented	National Dialogue reports	A: National relevant authorities, all major coastal area stakeholders and water users participate to the dialogues.
Output 2.4: National Assessments of Submarine Groundwater Discharges and of Marine – Freshwater Interactions	Number of Assessment Reports of Submarine Groundwater Discharges and of Marine – Freshwater Interactions.	Countries lack actionable knowledge on geochemical processes at the land – sea interface.	Assessments completed for all project countries	Assessment reports cleared by the Steering Committee	A: Full participation of the national scientific community.
Output 2.5: Coastal aquifer management plans produced on the basis of outputs 5.1, 5.2, and 5.3, and 5.4 including consideration of vulnerability, conjunctive management options, and land use capability and monitoring networks.	Number of Coastal Aquifers Management Plans completed including consideration of gender issues.	No specific legal/policy/management frameworks for costal aquifers exist at present.	National/local plans produced for 5 priority coastal aquifers, and submitted for adoption by local/national governance entities.	Aquifer Management Plans published.	A: National and local administrators committed to the Plans adoption and implementation.

Annex 3 Results framework for Child Project 2.1 of the MedProgramme

Output 2.6: Aquifer	Number of monitoring	Only sporadic monitoring	Monitoring networks and	Network design	Countries
monitoring multi-purpose	networks and protocols	implemented in some of the	protocols designed and	specifications	committed to
networks and protocols	designed and field tested, and	Mediterranean coastal aquifers	field tested and trainings	and protocols	network full
designed and field tested,	trainings carried out		conducted for all 5 priority	cleared by the SC.	installation and
and responsible personnel			aquifers.		maintenance.
trained, in the 5 priority					
aquifers					

























The Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security

Report of the First Regional Consultation

Athens, Greece 7 – 8 March 2018

MedProgramme Report of the First Regional Consultation

(Athens, Greece 7 – 8 March 2018)

Conclusions

- 1. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia took note of the progress achieved on the preparation of the Child Projects and validated the proposed activities, the sites chosen for their execution at national level and the timelines for the submission of the Child Projects to the GEF Secretariat for CEO endorsement.
- 2. The implementing and executing partners agreed to evaluate the feasibility of the specific requests of the countries for additional activities (namely those of Algeria under Child Project 2.1 and Bosnia and Herzegovina and Montenegro under Child Projects 1.1 and 1.3).
- 3. UN Environment/MAP committed to keep the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia fully informed of the progress on the development of the Child Projects and to provide the advanced versions of the project documents for comments at the appropriate time to the GEF Operational Focal Points and the country's nominated national thematic experts, if any.
- 4. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia committed to coordinate the gathering of comments from competent national institutions and thematic experts, and to provide UN Environment/MAP with a single set of official comments.
- 5. Regarding the letters of co-financing, the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia expressed their preference for a single letter detailing the co-financing contributions for each of the Child Projects of the MedProgramme. The UN Environment / GEF Task Managers for International Waters (IW) and Chemicals and Waste (CW) agreed to seek guidance from the GEF Secretariat and to inform them about how to proceed.
- 6. The implementing and executing partners and the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia agreed to take the necessary steps to ensure effective coordination with their respective counterparts in the programme (interministerial bodies, stakeholder groups, etc).
- 7. UN Environment/MAP took due note of the countries' call to ensure effective coordination among all Child Projects and to consider as much as possible cross-cutting issues like climate change and biodiversity.

Next steps

- 1. UN Environment/MAP will provide the GEF Operational Focal Points with:
 - a. an overview of the national and regional activities of the MedProgramme foreseen in each of the participating countries.
 - b. a responsibility matrix indicating the executing structure for each Child Project, including the implementing and executing partners and their respective roles.
 - c. the contact information for each of the implementing and executing partners.
 - d. clear indications about how to proceed with the preparation of co-financing letters including a template.
 - e. an overview of the national stakeholders engaged during the development of the project documents.

(Note: Items a, b and c will be submitted with the final meeting report of the First Regional Consultation. Items d and e will be provided in due course.)

- 2. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia will provide UN Environment/MAP with:
 - a. a list of national thematic experts including specific focal points for IW and CW to whom the advanced draft of the project documents will be sent for comments.
 - b. co-financing letters from any relevant national partners, including supporting coordination for combined letters across different child projects as needed.
- 3. The technical execution partners will support the GEF Operational Focal Points and national focal points in the identification of relevant initiatives which can contribute to the cofinancing support by countries. They will also provide UN Environment/ MAP with their own organizational co-financing letters.

Background information

- 1. The objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The MedProgramme was endorsed by the GEF Council in October 2016 and is comprised of seven Child Projects which will contribute to the GEF's focal areas of International Waters (IW), Chemicals and Waste (CW), and Biodiversity (BD) (Table 1). Nine countries have endorsed the MedProgramme: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia. It will be executed over a period of six years starting in 2019.
- 2. The First Regional Consultation for the MedProgramme was convened by UN Environment/MAP to bring together the participating countries and the implementing and executing agencies to: (i) take stock of progress on the development of the Child Projects; (ii) discuss next steps for completion of the submission package, including letters of cofinancing; and (iii) agree upon a timeline for the submission of documents to the GEF Secretariat. The agenda of the consultation is provided in Annex 1.

Table 1 Overview of the MedProgramme components, Child Projects, Executing Agencies and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)				
MedProgramme Component	Child Project	Indicative lists of executing Agencies	GEF Focal Areas	
Reduction of Land Based Pollution In Priority	1.1 Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts	UNEP/MAP	IW and CW	
Coastal Hotspots, and measuring	1.2 Mediterranean Pollution Hot Spots Investment Project.	EIB UNEP/MAP	IW and CW	
progress to impacts	1.3 Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC).	EBRD UNEP/MAP	IW and CW	
2. Enhancing Sustainability and	2.1 Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection.	UNEP/MAP UNESCO-IHP GWP-Med	IW	
Climate Resilience in the Coastal Zone	2.2 Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS.	GWP-Med UNEP/MAP	IW	
3. Protecting Marine Biodiversity	3.1 Management Support and Expansion of Marine Protected Areas in Libya.	UNEP/MAP IUCN WWF Med	BD	
4. Knowledge Management and Programme Coordination	4.1 Mediterranean Sea Basin Environment and Climate Regional Support Project.	UNEP/MAP	IW and CW	

Attendance

- 3. The regional consultation brought together 40 participants, including representatives from eight of the nine countries that endorsed the MedProgramme and all seven of the implementing and executing agencies. The complete list of participants is set forth in Annex 2.
- 4. The names, titles and affiliations of the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia and their nominated representatives that participated in the regional consultation are provided in Table 2. It should be noted that the GEF Operational Focal Point of Libya, Mr. Mustafa Soliman, confirmed his wish to attend the consultation, but was unable to do so as a result of difficulties encountered in the organization of his travel by UN Environment/MAP.

Table 2 Names, titles and affiliations of the GEF Operational Focal Points and the nominated representatives that participated in the First Regional Consultation for the MedProgramme

Country	Representative(s)	Title and affiliation
Albania	Ms. Ornela Çuçi*	Vice Minister, Ministry of Tourism and Environment
Algeria	Ms. Samira Hamidi	Inspectrice Centrale de l'Environnement et du Développement Durable, Ministère des Ressources en Eau et de l'Environnement Direction Générale de l'Environnement et du Développement Durable
Bosnia and Herzegovina	Dr. Senad Oprašic*	Head of Environmental Protection Department, Ministry of Foreign Trade and Economic Relations
Egypt	Mr. Mohamed Shehab AbdelWahab* Dr. Mohamed Osman	Chief Executive officer of Egyptian Environmental Affairs Agency, Ministry of Environment Undersecretary, Head of Sector, Environmental Management Sector, Ministry of Environment
	Mr. Moustafa Fouda	Advisor to the Minister on Biodiversity
Lebanon	Ms. Olfat Hamdan	Head of Protection of Urban Environment Department, Ministry of Environment
	Mr. Adel Yacoub	Head of Department, Protection of Natural Resources Department, Ministry of Environment
	Mr. Paul Moussa	Agricultural Engineer, Department of Natural Resources Protection, Ministry of Environment
Montenegro	Mr. Esef Husic	Acting General Director for Climate Change and Mediterranean Affairs, Ministry of Sustainable Development and Tourism
	Ms. Ivana Stojanovic	Advisor, Department for Mediterranean Affairs, Ministry of Sustainable Development and Tourism
Morocco	Ms. Nassira Rheyati	Chef de Service Coopération Multilatérale, Division de la Coopération Internationale, Direction du Partenariat, de la communication et de la Coopération, Secrétariat d'Etat chargé du Développement Durable
Tunisia	Mr. Karim Sahnoun	Directeur du suivi des conventions et des projets de coopération avec les partenaires étrangers, Direction Générale des Relations Extérieures, Ministère des Affaires Locales et de l'Environnement

^{*} GEF Operational Focal Point

Presentations

- 5. Presentations were delivered for each of the MedProgramme's seven Child Projects and the GEF Special Climate Change Fund (SCCF) Project, in addition to three presentations on the development process for the MedProgramme. The present report does not attempt to summarize these presentations, but focuses rather on the discussions they prompted.
- 6. All of the presentations delivered during the regional consultation are available at: https://www.dropbox.com/sh/zp1kgx6jl9ss8jk/AAD-1U2ik3rfHt5RK0kKza6Za?dl=0.

Welcoming remarks and initial discussions

- 7. Mr. Lorenzo Galbiati, UN Environment/MAP Secretariat (hereafter the Secretariat), welcomed the participants to Athens on behalf of the Coordinator of the Barcelona Convention Mr. Gaetano Leone. The Secretariat recalled the 40 year collaboration among the Convention's Contracting Parties, partners and UN Environment/MAP towards a shared vision for "a healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse contributing to sustainable development for the benefit of present and future generations." The Secretariat observed that the assessments, diagnostics, planning and experimentation carried out during this time had led to a consensus on priority areas for further intervention, and that together, the countries, UN/Environment MAP, the European Investment Bank, UNESCO-IHP, GWP-Med, WWF MedPO and IUCN have responded to this need by developing the Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. The MedProgramme will support countries by providing a comprehensive response to the provisions of the Barcelona Convention and its Protocols, of other legally binding agreements and other instruments and programmes, among them the Stockholm and Minamata Conventions and the UN Environment Global Programme of Action. The Secretariat reminded participants that the GEF Council approved the MedProgramme at the end of 2016 and will support its execution through grants from the International Waters. Chemical and Waste and Biodiversity Focal Areas. In conclusion, the Secretariat stated that the focus of the regional consultation was to update the countries on the status of the development of the MedProgramme and to agree together on the next steps to complete the process.
- 8. Participants were also welcomed by the MedProgramme's two implementing agencies: UN Environment and the European Bank for Reconstruction and Development (EBRD).
- 9. Mr. Yegor Volovic, the UN Environment GEF Task Manager for International Waters (IW), recalled the longstanding collaboration among GEF and the countries in the region, through the Barcelona Convention (for the Mediterranean Sea) and the Bucharest Convention (for the Black Sea). He also noted the forward-thinking vision of the MedProgramme (approved under GEF-6) which has environment security as its focus, a theme that is now well-established in GEF-7.
- 10. Ms. Eloise Touni, the UN Environment GEF Task Manager for Chemicals and Waste (CW), spoke about the multi-focal area approach of the MedProgramme and explained that this will be the GEF's strategy going forward. She explained that the GEF's activities on CW in the MedProgramme would support countries in efforts to meet obligations for POPs and mercury under the Stockholm, Basel and Minamata Conventions.
- 11. Ms. Dana Kupova, Principal of Resource Efficiency Investments at EBRD, explained EBRD's 10 year collaboration with the GEF Secretariat, which to present has focused on climate change

- adaptation and mitigation, and expressed her positive anticipation about expanding the Bank's activities to the IW and CW focal areas.
- 12. The Secretariat reviewed the agenda of the consultation with participants and briefly outlined the desired outcomes of the two-day event.
- 13. The representatives of several countries (Bosnia and Herzegovina, Egypt and Lebanon) asked for clarification on the modality for execution of activities at the national level. The Secretariat first clarified the distinction between GEF implementing and executing agencies. Implementing agencies of the GEF are responsible for delivering project proposals to the GEF Secretariat and liaising with the Secretariat and countries at the GEF Council, in addition to providing general oversight and quality control. Executing agencies of GEF projects are responsible for carrying out project preparation and execution of the activities on the ground with national, regional and international organizations, as appropriate, to achieve the expected results of the project. For the MedProgramme, the two implementing agencies are UN Environment and EBRD, and the seven executing agencies are UN Environment/MAP, EIB, EBRD, UNESCO-IHP, GWP-Med, IUCN and WWF-Med.
- 14. The Secretariat added that activities would be executed at the national level through a variety of arrangements, including through UN Environment's Regional Activity Centres (RACs), through international organizations like UNESCO, WWF and GWP-Med, and through other execution modalities. The Secretariat informed the participants that consultations organized with the countries to date on individual Child Projects (Annex 3) had clarified these arrangements in a number of cases and that future consultations would provide further opportunities to do so. Ultimately, it is up to the participating countries to express their wishes on the best approach to executing activities at the national level, in a manner that is compatible with the rules and regulations of the GEF Secretariat and the executing UN agencies, as well as the available resources for each Child Project.
- 15. In response to a question about the need to reflect emerging issues in the MedProgramme, the partners explained that GEF funds are earmarked for specific priority areas. For example, the issue of marine litter was not eligible under GEF-6 and was therefore not reflected in the MedProgramme. The issue of marine litter nevertheless will be tackled in the region thanks to complementary initiatives of the MAP system, and will furthermore be eligible under GEF-7. The UN Environment GEF Task Manager for IW reminded the participants that Mediterranean countries express their priorities on environmental issues via three consultative bodies (the UN Environment Assembly, the GEF Council and the Barcelona Convention) and on chemical-specific issues via their participation as Contracting Parties to the Stockholm and Minamata Conventions.
- 16. Mr. Esef Husic, Acting General Director for Climate Change and Mediterranean Affairs of Montenegro, also intervened to greet the participants of the meeting on behalf of the Ministry of Sustainable Development and Tourism of Montenegro and Mr. Igor Gradjevic, the GEF Operational Focal Point of Montenegro. He pointed out the positive experience of Montenegro during implementation of the MedPartnership and reminded of the exceptional results achieved in that process such as the preparation and adoption of the National Strategy for Integrated Coastal Zone Management (NS ICZM), preparation of the Integrated Resources Management Plan (IRMP) for the Buna/Bojana Area, vulnerability assessment of the coastal area to climate change including the sea-level rise, and the mapping of the valuable coastal habitats, etc. On the basis of these results and in line with NS ICZM, and the National Action Plan (NAP) for the implementation of the LBS Protocol and NAP for protection of the coastal biodiversity, Montenegro reiterated its priorities for the MedProgramme, including:

- Disposal of harmful waste containing PCBs and remediation of the hotspots, in the framework of the Child project 1.1 and in synergy, if possible, with Child project 1.2:
- Preparation of the local plans which mainstream the adaptation measures to climate change as part of the SCCF Project;
- Realization of priorities determined in the IRMP for the Buna/Bojana Area related to mapping of vulnerability of groundwater, identification of the level of pollution of the groundwater in aquifers, and establishment of the regular monitoring of groundwaters together with their baseline assessment.

Day 1 Agenda Item 1: Setting the scene and objectives of the consultation

17. The Secretariat emphasized that the MedProgramme was designed to accelerate the implementation of agreed actions identified from a series of transboundary diagnostic analyses of the Mediterranean Sea and subsequent strategic action programmes (SAP-MED and SAP-BIO) elaborated in the context of the Barcelona Convention at the request of its Contracting Parties. The MedProgramme is a direct contribution to the implementation of the UN Environment/MAP's Mid-term Strategy 2016 – 2021.

<u>Day 1 Agenda Item 2: Report on progress for preparation of the MedProgramme documents</u>

18. The Secretariat provided an update on the status of the logframes and project documents for each of the Child Projects and the SCCF Project (Table 3)

Table 3 Status of the logframes and project documents for the MedProgramme and the SCCF Project

Project	Logframe status	Project document status
Child Project 1.1	Preliminary draft prepared	Preliminary draft under
		preparation
Child Project 1.2	Intermediate draft prepared	Preliminary draft prepared
Child Project 1.3	Intermediate draft prepared	Intermediate draft under
		preparation
Child Project 2.1	Advanced draft prepared	Advanced draft prepared
Child Project 2.2	Preliminary draft prepared	Preliminary draft under
		preparation
Child Project 3.1	Preliminary draft prepared	Not yet initiated
Child Project 4.1	Intermediate draft prepared	Intermediate draft prepared
SCCF Project	Advanced draft prepared	Advanced draft prepared

- 19. The Secretariat provided an overview of the national and regional interventions planned for all countries (Annex 4). A matrix of responsibilities of the executing partners is set forth in Annex 5.
- 20. The representative from Egypt congratulated the partners on the progress achieved towards preparation of the MedProgramme, and expressed his view that biodiversity and climate change were not adequately addressed in the planned activities. The Secretariat explained that the MedProgramme reflected the GEF Council's priorities and was funded primarily with earmarked funds from the IW and CW focal areas, but that these issues were being addressed through complementary activities in the region. For biodiversity, this includes the MED MPA Project, the 2020 MPA Roadmap, and the technical support activities of SPA/RAC; and for climate change, this includes a variety of GEF interventions, including the Special Climate

Change Fund Project that will address climate change adaptation in six Mediterranean countries. The Secretariat acknowledged that the MedProgramme cannot address every issue, and for this reason it was better to focus on priority areas to achieve greater impacts. The UN Environment GEF Task Manager for IW offered to work with the countries to develop medium-sized projects to address other priorities, as this type of project can be approved faster that full-size projects or programmes.

- 21. The representative of SPA/RAC thanked the representative of Egypt for drawing attention to the need to strengthen efforts to protect biodiversity in the region, and noted that many other countries have raised this point in other contexts. In the opinion of the representative of SPA/RAC, this is a sign that the GEF Secretariat needs to consider including a regional biodiversity component in all regional projects/programmes, in view of its link to other areas including pollution and coastal zone management. The representative of SPA/RAC asked UN Environment to consider approaching the GEF Secretariat on this issue. The UN Environment GEF Task Manager for IW indicated that there were good opportunities for this in GEF-7 since its priorities include the blue economy and marine biodiversity, and that IW was a good entry point for transboundary MPAs, for example.
- 22. The representative of Morocco, speaking about her experience in the preparation of the Child Projects of the MedProgramme and the SCCF Project, pointed out that there is a need for the country to nominate a specific focal point for each of the projects, since the GEF Operational Focal Point and the MAP Focal Point (the same person in this case) cannot manage the entire portfolio of projects. The Secretariat suggested that each country could have a national focal point for each specific technical issue and that these focal points could be consulted (along with the GEF Operational Focal Point) when needed and invited to attend steering committee meetings for the projects that fall under their area of expertise. The UN Environment GEF Task Manager for IW agreed that each country needed specific focal points for the various projects.

<u>Day 1 Agenda Item 3: Next steps and timeline for submission of documents to the GEF</u> Secretariat

- 23. The Secretariat described the next steps for completion of the project documents, including the gathering of additional baseline information, organization of national consultations, preparation of co-financing letters, and validation of project documents by the GEF Operational Focal Points.
- 24. The Secretariat then presented the tentative timeline for submission of the project documents to the GEF Secretariat (Table 4).

Table 4 Targets for submission of project documents for review and endorsement

Project	Target for submission of proje document to GEF for CE endorsement	
Child Project 1.1	July 2018	
Child Project 1.2	August 2018	
Child Project 1.3	July 2018	
Child Project 2.1	June 2018	
Child Project 2.2	August 2018	
Child Project 3.1	October 2018	
Child Project 4.1	June 2018	
SCCF Project	June 2018	

25. The Secretariat recalled that each country would need to indicate clearly the different co-financing contributions for each of the relevant Child Projects, and that these contributions would be monitored on an annual basis. Furthermore, the modality for the preparation of co-financing letters in the context of a programmatic approach needs to be discussed with the GEF Secretariat, considering that normally one co-financing letter would be required per project per country (the MedProgramme would require more than 50 co-financing letters under this arrangement). There is clearly a need to simplify this process for the MedProgramme. The UN Environment IW Task Manager agreed to liaise with the GEF Secretariat to clarify this issue and propose an acceptable solution.

Day 1 Agenda Item 4: Child Project 1.1

- 26. Child Project 1.1 will be executed by UN Environment/MAP, in coordination between MED POL and two of UN Environment/MAP's Regional Activities Centres SCP/RAC and Plan Bleu. The project is expected to deliver the following main outcomes:
 - In coastal hot spots, measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
 - Update of the baseline situation (TDA), harmonization of monitoring protocols, methodologies and procedures in compliance with Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona Convention, including design of offshore reference network and gender assessment.
- 27. The discussion ensuing the project's presentation by the representatives of MED POL and SCP/RAC touched upon various aspects, including requests for clarifications on the selection of countries, sites and options prioritized in the preliminary proposal for disposal (POPs/PCBs and mercury) activities. Another important question raised by the participating countries was about coordination between various implementing/ executing agencies within MedProgramme as well as with other implementing agencies of related (GEF-funded or not) projects.
- 28. The representative from Montenegro highlighted the need for cooperation and coordination between Child Projects 1.1 and 1.3 to address national priorities, including contaminated sediments at the former shipyard Bijela (categorized as the hot spot B in the Barcelona Convention National Action Plan NAP) and provision of incentives to phase out in use PCBs in the aluminum plant in Podgorica. Furthermore, country missions were called for in order to discuss matters in greater detail. The need for coordination with the GEF-UNDP project for safe removal of PCBs was also highlighted.
- 29. The Secretariat explained that a partner coordination meeting would follow the two-day country consultations to address, among other things, specific issues raised by Montenegro. Missions to countries would be planned based on the partners' meeting discussions. The Secretariat emphasized the need for cooperation within the MedProgramme and with sister agencies, while avoiding double-counting and overlapping between different activities. The representative of UN Environment/MAP MED POL reminded that endorsement letters for the PCBs management were issued by Montenegrin authorities to both UN Environment/MAP and UNDP. Missions to countries (possibly joint for Child Projects 1.1 and 1.3) could take place in April 2018, to be facilitated by national authorities.
- 30. The representative of Bosnia and Herzegovina informed of the progress with preparation of the mercury initial assessment (MIA) and pointed out two locations where pronounced mercury contamination problems were identified. A plea was made to include Bosnia and

Herzegovina in the MedProgramme mercury removal activities. The representative of UN Environment/MAP - MED POL explained the reasons for not including Tuzla site in the preliminary plan for mercury disposal under Child Project 1.1, including its location (far outside the Mediterranean watershed) and the fact it was not addressed in the country's NAP, as well as MED POL Focal Point's confirmation of these facts. The representative of Bosnia and Herzegovina was invited to provide the MED POL with the MIA report.

- 31. The Secretariat considered that the feasibility of inclusion of the sites outside the Mediterranean watershed should be checked with the GEF Secretariat. The UN Environment GEF Task Manager for CW emphasized the importance of the national priorities (as identified in the relevant plans prepared under the Stockholm and Minamata Conventions) for the development of the MedProgramme interventions and welcomed more detailed proposals by the countries. A reference was made to Child Project 1.1 presentation on new POPs prevention opportunities and a recommendation was made to ascertain that calculations of any quantities to be offset through project interventions were acceptable to GEF Secretariat.
- 32. The representative of Lebanon expressed an agreement with presented criteria for preliminary selection of countries and sites for Child Project 1.1 disposal interventions and enquired about inclusion of specific locations and disposal options for Lebanon. As regards new POPs and mercury prevention, ideas were exchanged on how to validate the baseline data; working with lamps containing mercury was singled out as a viable prevention (and disposal) option.
- 33. The representative of Tunisia endorsed in principle the national activities included in the preliminary plan/ presentation for Child 1.1 (as well as for Child Project 1.2), emphasizing at the same time the need for assistance with remediation of POPs/ PCBs contaminated sites in the country.
- 34. The representative of Morocco pointed out the use of the PCBs management platform located in Casablanca could lower disposal costs for the proposed activities (compared to exports to the EU).

Day 1 Agenda Item 5: Child Project 1.2

- 35. European Investment Bank (EIB) is the main executing agency for the Child 1.2 project, with a contribution from UN Environment/MAP for the regional level activities (development of standards). The following main results are planned to be achieved through the project's components that will be executed by the EIB:
 - Reduction of organic pollution reaching the Mediterranean Sea causing coastal ecosystem degradation;
 - Depollution and water resources management at the level of catchments which are draining into the Mediterranean, in order to improve the human, environmental and health situation and reduce the contaminants loads entering the Mediterranean Sea;
 - Reduction and control of chemical and organic pollution from past and present industrial activities in coastal areas impacting human health and livelihoods, and coastal ecosystems, thereby reducing pollution discharges to the Mediterranean Sea;
 - Preparation of pre-investment studies for mercury decontamination and conversion of industrial processes.

- 36. Under Child Project 1.2 project, a 7 million USD GEF grant¹ will be utilized to support preparation of investments and strengthen capacities needed to reduce pollution in the Mediterranean hot spots. In the course of the preparation of the programme framework document (PFD), Child Project 1.2 was projected to mobilize up to 500 million USD in cofinancing. The representative of EIB presented specific sites and type of interventions considered for technical assistance under the GEF grant, including three projects in Egypt (wastewater treatment plants WWTPs and drains depollution), upgrade of a wastewater collection and treatment system (for the city of Tripoli) in Lebanon, upgrade of 10 WWTPs in Tunisia, and mercury depollution projects in Morocco and Tunisia. Following the EIB's presentation, the Secretariat asked whether the initially identified co-financing amount was still applicable.
- 37. The representative of EIB explained the background to the selection of areas of work presented at the meeting, including linkages to the Horizon 2020 goal of depolluting the Mediterranean and the pipeline of projects identified through the EU-funded Mediterranean Hot Spots Investment Programme (MeHSIP), the latter serving as the starting point for identification of specific projects to be developed through Child Project 1.2. The Barcelona Convention NAPs were also used as references, in particular for identification of hot spots (and in some instances for consideration/ cross-checking of specific projects). The representative of EIB reported that the co-financing is currently assessed at the level of 510 550 million USD, depending on bankability of the projects to be developed and willingness of the countries/ project promoters to borrow to implement specific interventions. Without the bankability of the selected projects, and the willingness of the countries to borrow, the co-financing would be not possible.
- 38. The representative of Lebanon raised a question on the possibility to add Saida WWTP and other projects (referring to reuse of treated wastewater and aquifer recharge) identified by national stakeholders to the MedProgramme/Child Project 1.2 selection process. The representative of EIB explained the selection started from the MeHSIP approved list of 24 projects and that there were delays in signing the cooperation agreement with Lebanon. Nevertheless, the Bank remains open for proposals of other projects for Lebanon (including Saida WWTP) provided that eligibility criteria are met.
- 39. The representative of Tunisia asked for clarification on the GEF grant funding for the MedProgramme Component 1 projects versus loans planned for specific projects implementation. UN Environment/MAP clarified the loan component (shown in the approved PFD as the Child Project 1.2 co-financing) referred to hard loans/ EIB funding to be approved for mature projects while as the in-kind portion of the total Child Project 1.2 co-financing referred to the share of the EC funds extended for the same purpose. The representative of Tunisia confirmed that the national projects (upgrade of 10 WWTPs in different regions, mercury depollution at SNCPA plant in Kasserine) considered under the Child Project 1.2 were in line with the national priorities, as outlined in the country's NAP and mercury initial assessment/ action plan.
- 40. The UN Environment/MAP MED POL presented its work on Child Project 1.2 related to the outcome on standards, i.e. development of common environmental standards for desalination, aquaculture and wastewater treatment. The intent is to develop, in the course of Child Project 1.1 implementation, a set of regional standards to enable better regulation (including eventual adoption of the new/updated Regional Plans) of activities and sectors where the gaps in the Barcelona Convention's regional measures to achieve Good Environmental Status (GES) in the Mediterranean have been identified.

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¹ Five million USD from International Waters Focal Area and 2 million USD from Chemicals and Waste.

- 41. The interventions of the representatives from Lebanon and Egypt emphasized the existence of strong national standards in some of the areas that will be subject to standards development and the sensitivities/ difficulties with adoption of regional ones (including the need for regional standards to be tuned with national ones). For wastewater and sludge management, preparation of guidelines was seen as more pertinent than the development of standards. The need to mobilize and use all the existing technical knowledge in the region in the course of implementing this set of regional activities was recommended.
- 42. The representative of UN Environment/MAP MED POL reiterated the development of standards was planned for the areas where the existing regional/ Barcelona Convention measures were assessed as insufficient to reach the GES. The outputs of the Child Project 1.2 activities will feed into the process of updating the existing and/or developing new Barcelona Convention Regional Plans, whereas the decision making process will be fully conducted in line with standard procedures of the Convention and its governing bodies. The work on the development of standards and new/updated Regional Plan is integrated in the UN Environment/MAP Programme of Work for the current biennium.
- 43. The representative of WWF pointed out the new INTERREG project implemented by WWF France (including work on aquaculture) should be consulted in the course of development of aquaculture standards.

Day 1 Agenda Item 6: Child Project 1.3

- 44. As the GEF Implementing Agency, the EBRD is leading on the preparation of Child Project 1.3 which will produce the following outcomes:
 - Public/ private investments enable pollution reduction in priority coastal and catchment areas through the improvement of water and waste water management systems and the introduction of modern and efficient technologies and practices;
 - Prevention or elimination of POPs.
- 45. Compared to Child Projects 1.1 and 1.2, preparation and implementation of the Child Project 1.3 has certain specificities due to the EBRD's different work approaches. The focus will be on municipalities and on private sector, with a dynamic project pipeline identified based on project selection criteria. The IW component of the project will focus primarily at municipal wastewater treatment projects. The areas of interest for the CW component (POPs elimination) will be electricity distribution companies, industries (where POPs/ PCBs disposal and prevention activities are likely to be linked to larger modernization loans/ packages) and potentially agri-business (for possible substitution and disposal of POPs pesticides that are still in use). Due to the dynamic nature of developing the project pipeline, sites and companies (potential beneficiaries of the project), will not be known at this stage, and the Bank's internal rules limit options for their disclosure to third parties.
- 46. The representative of Montenegro pointed out that no information on the Child Project 1.3 development activities had been received by the country so far and expressed interest/need to hold consultations and learn more about the scope of work of the consultants conducting pertinent assessments for the EBRD. A similar intervention was made by the representative of Albania, emphasizing the need to meet the consultants and discuss priorities with them. The representative of Bosnia and Herzegovina highlighted the need for more detailed discussion as regards prevention of new POPs, and suggested the Child Project 1.1 and Child Project 1.3 activities should be combined. In addressing these interventions, the representative of EBRD explained the work conducted so far was aiming to generate a

- snapshot of the countries' situation and that the National Implementation Plans (NIPs) for the Stockholm Convention have been analyzed. Based on these analyses, project selection criteria would be defined and project pipeline built.
- 47. The representative of EBRD explained the GEF funding would be used for technical assistance (including project preparation) and potentially for grants to overcome specific market barriers associated with the implementation of environmental technologies. Another potential use of the GEF funds is provision of technical assistance (including project preparation). For the time being, EBRD is not considering use of intermediary banks in the projects' implementation phase.
- 48. The representative of Montenegro pointed out the links between Child Projects 1.1. and 1.3 and expressed interest to explore possibilities to address two priority sites (Aluminum plant and former shipyard Bijela) through the MedProgramme and in coordination with the ongoing UNDP and the World Bank projects (the former funded by the GEF, the latter through the World Bank loan). The representative of EBRD took note of the interventions, flagged the two sites as potential Child Project 1.3 project sites, and emphasized the Bank could provide loans for the larger investment interventions while using GEF funds for technical assistance and grants. Further discussions and coordination are necessary to define possible interventions.
- 49. The representative of Lebanon raised the question about potential overlap concerning what Child Projects 1.1 and 1.3 are aiming to deliver. The Secretariat pointed out the differences in the targets of the two projects while the representative of EBRD highlighted the difference in the funding approaches: for example, potential disposal of PCBs supported through Child Project 1.3 funding would be coupled with the Bank's loan for new investments leading to improved management of chemicals and wastes.
- 50. The question of expected submission date of the Child Project 1.3 to the GEF Secretariat was raised. The representative of EBRD explained the process was challenging nevertheless the completion of project preparation phase was planned for mid-summer.
- 51. The representative of Albania asked for clarification on potential beneficiaries of the projects to be funded through Child Project 1.3. The representative of EBRD explained sovereign lending was not considered for the time being, while as municipal and private sectors were identified as the key potential recipients (municipalities in particular for the IW component and waste water management improvements).
- 52. Regarding the regional level activities, the representative of EBRD explained the strategy was to ensure that experiences with successful national interventions would be disseminated across the region and potentially replicated in partnership with participating and other companies.
- 53. The representative of Tunisia emphasized the necessity for coordination between different executing Agencies, since some activities concern three child projects (1.1, 1.2 and 1.3).

Day 2 Agenda Item 2: Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"

- 54. Child Project 2.1 will be executed jointly by UN Environment/MAP and two of its RACs (PAP/RAC and Plan Bleu) and by UNESCO-IHP and GWP-Med. The Child Project will achieve the following outcomes:
 - Coastal zone sustainability enhanced through the adoption of comprehensive ICZM strategies, coastal plans and instruments (MedProgramme Outcome 4).

- Increased resilience to climate variability and change, and enhanced water security of
 coastal populations through improved sustainability of services provided by coastal
 aquifers and by groundwater related coastal habitats (MedProgramme Outcome 5).
- 55. The representative of Algeria expressed interest in discussing the possibility of Algeria benefitting from national level activities in the context of Child Project 2.1. The Secretariat responded that Algeria had endorsed the MedProgramme in December 2017, when the preparation of Child Project 2.1 was already well advanced. Algeria will benefit from the regional activities foreseen in this Child Project (e.g., training and capacity building including on submarine groundwater discharges, gender and conjunctive management of water resources; awareness raising; support to ICZM Protocol ratification; etc.). The executing partners agreed to evaluate the possibility of accommodating Algeria's request. However, the representative of UNESCO-IHP expressed concerns about the constraint of the budget available for the MedProgramme Outcome 5 and the risk of jeopardizing the successful implementation of initially foreseen activities by increasing the number of national activities.
- 56. The representative of Egypt observed that the execution of a project with four partners would be challenging and also pointed out the need to consolidate the monitoring framework for Child Project 2.1. In response, the executing partners first recalled their successful joint execution of activities for the MedPartnership, including the development of the Integrative Methodological Framework (IMF), a practical tool to integrate considerations of integrated coastal zone management, integrated water resources management and groundwater management. This tool will guide the partners in the integration of their individual and joint activities for Child Project 2.1. Next, with respect to monitoring, the executing partners recalled that the project would benefit from an existing monitoring framework established for the Barcelona Convention, including the Integrated Monitoring and Assessment Programme (IMAP) for the achievement of good environmental status in the Mediterranean, and indicators related to implementation of the ICZM Protocol, the Mediterranean Strategy for Sustainable Development, and the ecosystem approach, amongst others. Finally, the Secretariat reminded the participants that one of the objectives of Child Project 4.1 was to ensure the effective coordination among all projects and partners, including through the organization of yearly stocktaking meetings, communication tools such as the MedProgramme website and the establishment of a Programme-wide results monitoring framework.
- 57. The representative of Montenegro took the opportunity to request assistance on transboundary cooperation with Albania related to Child Project 2.1 and to draw attention to some additional priorities regarding the focus of groundwater activities. representative of Montenegro reminded the participants that the Buna/Bojana area had been officially confirmed as Montenegro's priority area for Child Project 2.1 and that an integrated resource management plan had been developed for this area in the context of the A framework agreement between Montenegro and Albania for the MedPartnership. sustainable development of Skadar Lake and Buna/Bojana was subsequently drafted and is currently awaiting signature by the two countries. The plan includes the establishment of a joint commission between Montenegro and Albania to support its implementation. In view of this, the representative of Montenegro requested that efforts be made under Child Project 2.1 to support the establishment of the joint commission with Montenegro and Albania, once the agreement has been officially adopted. On a related note, the representative of Montenegro also stated that the integrated resource management plan for the Buna/Bojana area called for the preparation of vulnerability maps for the area's aguifer as well as monitoring of The representative of UNESCO-IHP congratulated the groundwater parameters. representatives of Montenegro and Albania on their cooperation and confirmed UNESCO's willingness to work with both countries on the joint commission, and to address the requested

- aquifer vulnerability mapping within its activities for Child Project 2.1. UNESCO-IHP highlighted at the same time its concerns about the limitation of available funds.
- 58. The representative of Morocco recalled the country's request to monitor hydrographic indicators in the context of Child Project 2.1 and to ensure effective coordination between the activities of Child Project 2.1 on ICZM and those of the SCCF Project on climate change adaptation in the coastal zone. The representative of Morocco also thanked the executing partners for integrating its expressed priorities into the design of the activities for Child Project 2.1.
- 59. The representative of Tunisia indicated that an official letter documenting the country's priorities for Child Project 2.1 would soon be transmitted to UN Environment/MAP, and also confirmed that the priorities of Tunisia for this Child Project are: for the aquifer, it is the Ras Jebel coastal aquifer, and for ICZM, the region of coastal area of the Gulf of Monastir and the Kerkennah Archipelago.
- 60. As at 7 March 2018, official letters expressing priorities for activities under Child Project 2.1 have been received from the GEF Operational Focal Points of Egypt, Morocco and Lebanon.

Day 2 Agenda Item 3: Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

- 61. Child Project 2.2 will be executed jointly by UN Environment/MAP and GWP-Med, and will achieve the following outcomes:
 - Enhanced water, food, energy and ecosystems integrated governance, security and sharing of benefits;
 - Reduced trade-offs among sectors and more balanced competing water uses;
 - Sustainability of basin/aquifers and coastal and marine zones as well as supported economic activities and biodiversity.
- 62. Following an overview of the Child Project, the representative of GWP-Med informed the participants that two sub-regional consultations would be organized in the coming months: one in the Adriatic and one in the MENA region. These consultations will provide ample opportunities for the countries to express their priorities with respect to the planned activities, which include assessments and plans based on the nexus approach.
- 63. The representative of Albania expressed interest in participating in the activities of this Child Project, provided that the outputs are action-oriented and do not simply involve the elaboration of strategies. The representative of GWP-Med confirmed that the outputs include action plans, but reminded the participants that it was ultimately the country's responsibility to ensure their implementation.
- 64. The representative of Lebanon inquired about the possibility of undertaking national level activities of this Child Project in Lebanon. The representative of GWP-Med indicated that this was a possibility, especially in view of the strong synergies that could be achieved with the activities foreseen in Lebanon for Child Project 2.1, including sustainable management of the Damour aquifer and the preparation of the National ICZM Strategy.
- 65. The representative of Morocco expressed interest in exploring the possibility of taking part in the activities of this Child Project, recalling that Morocco has many strategies for water, energy, food and ecosystems and that opportunities existed for improved integration among these domains. Furthermore, Morocco's National Sustainable Development Strategy recognizes each of these domains as priority area, and the activities of Child Project 2.2 could

assist the country in meeting the relevant commitments under this strategy. The representative of Morocco informed the participants that the relevant institutions would be consulted about the country's potential participation in national level activities for this Child Project.

Day 2 Agenda Item 4: Child Project 3.1 "Management Support and Expansion of Marine Protected Areas in Libya"

- 66. Child Project 3.1 will be executed jointly by UN Environment/MAP, SPA/RAC, IUCN, and WWF-Med. and will achieve the following outcome:
 - Expansion of seascapes under protection in Libya, and improved protected area management through the implementation of the Libyan Marine Protected Areas (MPAs) National Strategy, mapping of marine key habitats, monitoring of marine megafauna (mammals, seabirds, turtles and cartilaginous fish), capacity support mechanisms and adoption of permanent solutions.
- 67. Following a presentation of the activities of Child Project 3.1, the representative of SPA/RAC explained that development of the project document would soon begin in earnest, with the recruitment of a national expert and the organization of an inception meeting with the relevant stakeholders in Libya. UN Environment/MAP explained that the development of this Child Project had been placed on hold for a specific reason, namely to conduct discussions with other donors about the possibility of expanding activities to countries other than Libya. Finally, however, it was decided in February 2018 to proceed with the development of the project for Libya as originally planned. UN Environment/MAP indicated that the development of the project document would proceed swiftly, in view of the fact that the project involves only one country, and that executing partners have already gathered substantial information for the baseline situation.
- 68. In terms of the identification of the 24 sites of conservation interest that will comprise the Libyan network of MPAs to be established under Child Project 3.1, the representative of SPA/RAC indicated that the executing partners have made a preliminary assessment based on existing data from SPA/RAC and WWF in Libya as well as through desk studies. The next step will be to conduct a rapid assessment of Libya's coast to identify additional candidate areas and to agree upon a final list of sites to be included in the national network of MPAs.
- 69. The representative of Egypt cited the country's extensive experience in the management of MPAs and invited the executing partners to consider the organization of capacity building workshops for Libyan experts at MPAs in Egypt. The representative of SPA/RAC thanked the representative of Egypt for this suggestion and explained that capacity building within Child Project 3.1 would focus on the 'train the trainer' approach and would provide opportunities for trainees to apply MPA management strategies in small-scale projects conducted outside of the scope of the MedProgramme. The representative of SPA/RAC observed that the design of training activities including the possibility of travel was subject to the available budget.
- 70. In view of potential synergies between Child Project 3.1 and Child Project 2.1, the representative of UNESCO-IHP recalled to the participants that UNESCO will undertake activities related to submarine groundwater discharge with Libya, in the form of regional trainings and capacity building in collaboration with the General Water Authority.

Day 2 Agenda Item 5: Child Project 4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project"

- 71. Child Project 4.1 will be executed by UN Environment/MAP, and will achieve the following outcomes:
 - Increased uptake of lessons and of cutting-edge knowledge generated across the
 portfolio of interventions, and the active participation in IW LEARN activities,
 Communities of Practice, and events; improve the capacity of key regional
 stakeholders and of the global IW community to build climate resilience, maintain
 coastal resources, protect biodiversity and restore coastal ecosystems.
 - The effective coordination and learning among all Child Projects, consistency with the Programme objectives, and synergies among projects and partners, ensured.
- 72. The Secretariat informed the participants that a key element of Child Project 4.1 is the Knowledge Management Strategy and associated tools that will facilitate information sharing and promotion of the Programme's results among the partners, the region's stakeholders and beyond. He added that a Knowledge Management Specialist would be recruited in April 2018 to provide guidance on this aspect of the Child Project, including on the requirements for the creation of an appropriate knowledge platform and for populating this platform with appropriate data from the countries and partners. A successful example of an effective knowledge platform was cited: the case of the platform for the GEF's Caribbean Regional Fund for Wastewater Management (GEF-CREW) (http://www.gefcrew.org/).
- 73. With respect to the Knowledge Management Strategy and the related platform, the UN Environment GEF Task Manager for CW requested that the Knowledge Management Specialist reflect all indicators of all child projects in the establishment of the relevant tools and frameworks. It was furthermore explained that the GEF's Chemical and Waste Focal Area has created a proof-of-concept platform to assist countries in meeting the reporting requirements of the Stockholm and Basel Conventions (https://m.youtube.com/watch?v=BMyc6alVeh0).
- 74. The representative of Egypt asked that special attention be given to designing data collection and management tools that support policy development, while at the same time responding to the needs of the GEF Secretariat and the Programme partners. The Secretariat confirmed that one of the aims of the Child Project 4.1 was to strengthen the science-policy interface, and that a great deal of relevant data has already been generated by the countries. Furthermore, the knowledge platform proposed under Child Project 4.1 could be used to aggregate and promote these data, with the clear understanding that no data would be disseminated without the permission of its owner. The Secretariat noted that this knowledge platform could one day become a tool of the Contracting Parties of the Barcelona Convention.
- 75. The representative of Albania noted that many countries lacked data and asked whether the Programme would support generation of data for the Integrated Monitoring and Assessment Programme (IMAP). The Secretariat confirmed that certain data generated from the MedProgramme could indeed assist countries in meeting the IMAP reporting requirements.
- 76. In response to the representative of Albania's suggestion to employ social media tools to promote the Programme, the Secretariat confirmed that the use of modern communication tools including social media, YouTube and thematic videos would be fully integrated in the Programme's communication and outreach strategy.

Day 2 Agenda Item 6: GEF Special Climate Change Fund (SCCF) Project

77. The SCCF Project will be executed by UN Environment/MAP and GWP-Med and will achieve the following outcomes:

- Stakeholder engagement on climate change adaptation is strengthened and partnerships are enhanced.
- Adaptation mainstreamed into IZCM strategies and coastal plans.
- Public spending relative to climate change adaptation in the coastal zone prioritized and national resources mobilized.
- Facilitated access to international climate change adaptation financing.
- Strengthened science-policy interface, accessibility of related knowledge and enhanced regional climate information.
- 78. The Secretariat recalled that the SCCF Project is a medium-sized project that will mainstream climate change adaptation into coastal planning using a proven approach that was successfully implemented in a past GEF intervention in the region. New funding opportunities under the GEF-7 Replenishment may provide opportunities for replication of this approach in the region.
- 79. Regarding the geographic scope of the national level activities foreseen in Morocco for the SCCF Project, the representative of Morocco reiterated her wish to maintain the same scope as Child Project 2.1, namely the Tanger-Tétouan-Al Hoceima region. The representative of Morocco recalled that it would be most efficient to work in this manner, as the same stakeholders would be engaged for both projects. The representative of PAP/RAC (the executing agency that will lead the ICZM activities in Child Project 2.1 and the integration of climate change adaptation in coastal plans for the SCCF Project) concurred that it would be best to work at the regional level.
- 80. During the discussion of execution modalities for activities foreseen at the national level in the SCCF Project, the representatives of Montenegro and Morocco reiterated their wishes to have PAP/RAC and Plan Bleu execute the planned activities in their respective countries on the preparation of recommendations for integrating climate change adaptation in local coastal planning processes.
- 81. The representative of Egypt recalled that his country was among the countries most vulnerable to climate change and inquired about why the country was not participating in the SCCF Project. The Secretariat recalled that Egypt had been invited to contribute to and endorse the Project Identification Form (PIF) of the GEF SCCF Project but that unfortunately this did not occur. The Secretariat recalled that an official letter was transmitted to the GEF Operational Focal Points of all GEF eligible countries on 9 September 2016 to inform about the opportunity to participate in the SCCF Project and to request inputs and advice from the countries on the development of the PIF. This communication was followed by a second letter on 30 September 2016 to formally request the endorsement of the PIF by the countries prior to the submission to the GEF Secretariat. Six countries issued letters of endorsement for the SCCF Project, namely Albania, Algeria, Libya, Montenegro, Morocco and Tunisia.
- 82. The representative of PAP/RAC recalled that a large project entitled "Enhancing climate change adaptation in the North coast and Nile Delta Regions in Egypt" had recently been approved by the Green Climate Fund for execution by UNDP Egypt and the Ministry of Water Resources and Irrigation. The PAP/RAC National Focal Point for Egypt has already undertaken a consultation with the Ministry of Water Resources and Irrigation and with UNDP Egypt and they agreed to build synergies with the GEF MedProgramme CP 2.1.

Day 2 Agenda Item 7: Discussion on timeline for completion of the development phase

83. Following discussions, the GEF Operational Focal Points, the nominated representatives and the implementing and executing partners agreed on the tentative timelines proposed for the completion of the project documents and their submission to the GEF Secretariat for endorsement, as set forth in Table 4 of the present report.

Day 2 Agenda Item 8: Conclusions of the first regional consultation

84. In the closing of the consultation, the GEF Operational Focal Points, the nominated representatives and the implementing and executing partners agreed on a set of conclusions and next steps, which have been reformulated for clarity and are set forth on pages 2 and 3 of the present report.

Annex 1 Agenda of the First Regional Consultation of the MedProgramme

	Day 1: 7 March 2018
9:00 - 9:30	Registration
9:30 - 9:45	Welcoming remarks: UN Environment
9:45 - 10:30	Setting the scene and objectives of the consultation:
	UN Environment/MAP
10:30 - 11:00	2. Report on progress for preparation of the MedProgramme documents:
	UN Environment/MAP
11:00 - 11:30	Coffee Break
11:30 - 12:00	3. Next steps and timeline for submission of documents to the GEF
	Secretariat: UN Environment/MAP
12:00 - 13:00	4. Update on Child Project 1.1: Project partners (MED POL, SCP/RAC,
	Plan Bleu)
13:00 - 14:30	Lunch
14:30 - 15:30	5. Update on Child Project 1.2: Project partners (EIB and MED POL)
15:30 - 15:45	Coffee Break
15:45 - 16:45	6. Update on Child Project 1.3: Project partner (EBRD)
16:45 – 17:00	7. Conclusions of Day 1
17:00	End of Day 1

	Day 2: 8 March 2018
9:30 - 9:45	Opening remarks: UN Environment/MAP
9:45 - 10:45	2. Update on Child Project 2.1: Project partners (PAP/RAC, UNESCO-IHP,
	GWP-Med and Plan Bleu)
10:45 - 11:15	Coffee Break
11:15 - 12:15	3. Update on Child Project 2.2: Project partner (GWP-Med)
12:15 - 13:45	Lunch
13:45 – 14:45	4. Update on Child Project 3.1: Project partners (SPA/RAC, WWF and
	IUCN)
14:45 – 15:15	5. Update on Child Project 4.1: UN Environment/MAP
15:15 - 15:45	6. Update on the GEF Special Climate Change Fund Project
15:45 - 16:15	Coffee Break
16:15 – 17:15	7. Discussion: Timeline for completion of the development phase
17:15 – 17:30	8. Conclusions of the first regional consultation
17:30	Closing of the consultation

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Annex 3 List of consultations organized to date in the context of the MedProgramme

Project/programme	Type of consultation/activity	Location	Dates
Child Project 1.1	Regional Workshop on "Improved and	Rabat,	30 October
	Harmonized POPs Inventories and Action	Morocco	to 3
	Plan" organized by the Stockholm		November
	Convention Regional Centre for North		2017
	Africa		
Child Project 1.1	Technical mission to Lebanon to identify	Beirut,	17 – 21
	potential interventions and sites for PCBs	Tripoli,	December
	disposal/remediation	Lebanon	2017
Child Project 1.1	Technical mission to Tunisia to identify	Tunis,	31 January –
	potential interventions and sites for PCBs	Tunisia	2 February
	and mercury disposal/remediation	-	2018
Child Project 1.1	Technical mission to Algeria to identify	Algiers, Tizi	12 – 15
	potential interventions and sites for PCBs	Ouzu,	February
	and mercury disposal/remediation	Algeria	2018
Child Project 1.2	Meeting mission with promotor and GEF	Tunis,	23-24 March
	focal point in relation to upgrading and	Tunisia	2017
01:11.0	extension of 10 WWTP	- .	04.06
Child Project 1.2	Technical mission to meet the promotor	Tetouan,	24-26 July
	and GEF focal point in relation to COELMA	Morocco	2017
Child Duciont 1 0	project	Dobot	E Fahmiami
Child Project 1.2	Meeting with promoter, GEF focal point	Rabat,	5 February 2018
	and project consultants to kick off technical assistance for project	Morocco	2018
	· · · · · · · · · · · · · · · · · · ·		
Child Project 1.2	preparation Meeting with promoter, GEF focal point	Tétouan,	6 February
Cilila Project 1.2	and stakeholders to present COELMA	Morocco	2018
	project	WIOTOCCO	2010
Child Project 1.2	Stakeholder consultation and pre-	Tripoli,	On going
omia i roject i.z	appraisal of the project by EIB	Lebanon	on going
	appraisal or the project by 2.5	200411011	
Child Project 1.2	Feasibility studies are on-going for the	Egypt	On going
	three projects. A baseline data have been	-9761	on going
	collected and available information on		
	the institutional/policy framework has		
	been prepared for Alexandria West		
	WWTP.		
Child Project 2.1	Sub-regional consultation with the	Tivat,	26
	Adriatic countries	Montenegro	September
			2017
Child Project 2.1	Sub-regional consultation with the	Rabat,	12 – 13
	Southern Mediterranean countries	Morocco	December
22255			2017
SCCF Project	First Regional Consultation	Rabat,	13 – 14
		Morocco	December
0005 Desired	Nigational agencylates as a contain 8.4	Dobot	2017
SCCF Project	National consultation with Morocco	Rabat,	8 - 9
		Morocco	February
			2018

Annex 3 List of consultations organized to date in the context of the MedProgramme

Project/programme	Type of consultation/activity	Location	Dates
SCCF Project	National consultation with Montenegro	Podgorica,	12 - 13
		Montenegro	February
		_	2018
MedProgramme	First Regional Consultation	Athens,	7 - 8 March
	-	Greece	2018

Annex 4 Overview of the national and regional interventions planned for all countries in the MedProgramme

(ATTACHED)

Annex 5 Matrix of responsibilities of the executing partners for the MedProgramme

MedProgramme - Overview of responsibilities for execution

Partner countries: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, State of Libya, Montenegro, Morocco, and Tunisia

Lead GEF Agency: UN Environment

Other GEF Agency: EBRD

Executing Partners: UN Environment/MAP, EIB, UNESCO-IHP, GWP-Med, WWFMedPO, IUCN

<u>Component 1: Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts</u>

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots

and Measuring Progress to Impacts"

Type of activity	Plan Bleu	SCP/RAC	MED POL	UN
				Environment
				MAP
Disposal		✓	✓	
Remediation			✓	
Prevention		✓		
Other		✓	✓	
Measuring progress to impacts	✓		✓	
Programme-wide communication				✓
and knowledge management				

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

Type of activity	EIB	MED POL	UN
			Environment
			MAP
WWTP extension and upgrade	✓		
(incl. reuse)			
Depollution of catchment areas	✓		
Reduction and control of industrial	✓		
pollution			
Reduction of mercury releases	✓		
Other activities	✓		
Environmental standards		✓	
Programme-wide communication			✓
and knowledge management			

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

child Project 1.5 Mediterranean Sea Philance for Water Systems a		
Type of activity	EBRD	UN
		Environment
		MAP
Water management systems	✓	
upgrades		
Reduction and prevention of POPs	√	
Other activities	✓	
Dissemination/ replication	✓	
Programme-wide communication		✓
and knowledge management		

Annex 5 Matrix of responsibilities of the executing partners for the MedProgramme

Component 2: Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

Type of activity	GWP-Med	Plan Bleu	PAP/RAC	UNESCO IHP	UN Environment
				ШТ	MAP
Coastal zone management	✓	✓	✓		
Management of Coastal Aquifers and Related Ecosystems				√	
Programme-wide communication and knowledge management					√

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

INEXUS		
Type of activity	GWP-Med	UN
		Environment
		MAP
Nexus assessments, related	✓	
capacity building and institutional		
support		
Identification of bankable nexus	✓	
interventions		
Communication and outreach	✓	✓
Programme-wide communication		✓
and knowledge management		

Component 3: Protecting Marine Biodiversity

Child Project 3.1 "Management Support and Expansion of Marine Protected Areas in Libya"

Type of activity	IUCN	SPA/RAC	WWF MedPO	UN Environment MAP
Inventory of marine and coastal sites of conservation interest in Libya	√	~		
Strengthening the governance of marine protected areas		~		
Reduction and control of industrial pollution				
Effective management of MPAs	√	✓	√	
Civil society engagement	✓	√	√	
Capacity building	✓	✓	✓	
Awareness raising and communication	√	✓	√	<u> </u>
Programme-wide communication and knowledge management				√

Annex 5 Matrix of responsibilities of the executing partners for the MedProgramme

Component 4: Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project"

Type of activity	UN	All
	Environment	partners
	MAP	
Knowledge sharing ar	d ✓	✓
dissemination of results		
Coordination and synergies	✓	

GEF Special Climate Change Fund (SCCF) Project²

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

Partner countries: Albania, Algeria, State of Libya, Montenegro, Morocco and Tunisia

GEF Agency: UN Environment

Executing partners: UN Environment/MAP, PAP/RAC, Plan Bleu, GWP-Med

Type of activity	GWP-Med	PAP/RAC	Plan Bleu	UN
				Environment
				MAP
Stakeholder engagement, capacity	✓	✓	✓	
building and cooperation				
Mainstreaming climate change		✓	✓	
adaptation in coastal planning				
Access to financing mechanisms	✓			
for climate change adaptation				
Knowledge management,				✓
communication and				
dissemination				

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² The SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas" was approved after the adoption of the MedProgramnme as an external intervention. However, it was agreed with the GEF Secretariat and the participating countries that the project, would be executed as part of the Programme to maximize synergies and efficient use of resources.

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	 Potential for PCBs disposal considered (for later phase of project implementation)
Remediation	None
Prevention	None
Other activities	 Support for the PCBs inventory considered (pending confirmation of the need)
	Capacity building for ESM of PCBs
Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge, for consideration in the Barcelona Convention framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities	
Coastal Zone	National assessment to support implementation of the ICZM Protocol
Management	 Coast Day central celebration dedicated to coastal aquifers
Management of Coastal Aquifers and Related Ecosystems	 For the Buna - Bojana Transboundary Coastal Aquifer (in cooperation with Montenegro): In-depth assessment and characterization of the aquifer through the application of a multi-disciplinary indicator-based methodology Identification and evaluation of coastal aquifer and ecosystems services Analyses of saline intrusion processes National Dialogues identifying potential conjunctive management solutions Preparation of coastal aquifer management plan Aquifer monitoring multi-purpose networks and protocols
	designed and field tested, and responsible personnel trained
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Regional Assessment of Submarine Groundwater Discharges Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface water and groundwater management Gender training on sex-disaggregated water data collection
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)
Nexus	In three priority coastal areas:
assessments,	Nexus assessments conducted
related capacity building and institutional support	 Nexus assessments conducted Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment
Communication and outreach	 Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas
Regional activities	
Nexus assessments, related capacity building and institutional support	Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

Regional activities	
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

GEF Special Climate Change Fund Project (SCCF Project)

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

Regional activities	
Stakeholder engagement, capacity building and cooperation	 Training on climate change adaptation solutions, including ecosystem-based solutions, for technical experts and decision makers Sub-regional workshops for international finance institutions, and the banking, insurance and private sectors to enhance the use of coastal climate risk and vulnerability in investment decisions
Access to financing mechanisms for climate change adaptation	 Development of methodological guidelines on preparation of financing plans for climate change adaptation in coastal areas including domestic, international and private sector investments Countries invited to participate in the development of a full-fledged project proposal to access international financing support for climate change adaptation in coastal zones
Knowledge management, communication and coordination	 Regional meeting to share knowledge and lessons learned, and to discuss opportunities for replication at the national level in additional countries Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	 PCBs disposal (sites and quantities to be determined) Disposal of POPs others than PCBs (sites and quantities to be determined)
Remediation	 Small-scale interventions considered for priority sites contaminated with POPs/ PCBs
Prevention	Options for prevention of new POPs assessed
Other activities	 Support for PCBs dynamic inventory considered (pending confirmation of the need)
	 Capacity building for ESM of POPs/ PCBs
Regional activities	S
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge, for consideration in the Barcelona Convention framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities	
Coastal Zone Management	 National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol Coast Day central celebration
Management of Coastal Aquifers and Related Ecosystems	None
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface water and groundwater management Gender training on sex-disaggregated water data collection
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)
Nexus assessments, related capacity building and institutional support	In three priority coastal areas: Nexus assessments conducted Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment
Communication and outreach	 Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas
Regional activities	

Nexus assessments, related capacity building and institutional support	Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	 Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

	Regional activities
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

GEF Special Climate Change Fund Project (SCCF Project)

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

Regional activities		
Stakeholder engagement,	•	Training on climate change adaptation solutions, including ecosystem-based solutions, for technical experts and decision
		makers

capacity building and cooperation	 Sub-regional workshops for international finance institutions, and the banking, insurance and private sectors to enhance the use of coastal climate risk and vulnerability in investment decisions
Access to financing mechanisms for climate change adaptation	 Development of methodological guidelines on preparation of financing plans for climate change adaptation in coastal areas including domestic, international and private sector investments Countries invited to participate in the development of a full-fledged project proposal to access international financing support for climate change adaptation in coastal zones
Knowledge management, communication and coordination	 Regional meeting to share knowledge and lessons learned, and to discuss opportunities for replication at the national level in additional countries Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	None
Remediation	None
Prevention	None
Other activities	None
Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge, for consideration in the Barcelona Convention framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities	
Coastal Zone Management	 National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol National consultation to support the launch of an Inter-Ministerial Committee
Management of Coastal Aquifers and Related Ecosystems	None
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation
	 Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface water and groundwater management Gender training on sex-disaggregated water data collection
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)
Nexus	In three priority coastal areas:
assessments, related capacity building and institutional support	 Nexus assessments conducted Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment
Communication and outreach	Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas
Regional activities	
Nexus assessments, related capacity building and institutional support	Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

	Regional activities
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	None
Remediation	None
Prevention	 Mercury prevention options considered (pending confirmation of eligibility)
	 Options for prevention of new POPs considered (pending country's confirmation of interest)
Other activities	 Support for PCBs inventory considered (pending confirmation of the need)
Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

National activities	
WWTP extension and upgrade (incl. reuse)	 Extension in the capacity and upgrade treatment level for Alexandria West Wastewater Treatment Plant, including sludge treatment Assessment of demand and definition of the technical options to achieve the required level of wastewater and sludge treatment in WWTPs to meet the requirements for reuse as well as minimize the operation costs Rehabilitation and extension of existing WWTPs and rehabilitation of drains' structures – Bahr Al Baqar drain Rehabilitation and possibly extension of several wastewater treatment plants currently inefficient - Nile catchment area
Depollution of catchment areas	 Definition of technical options for investment in depollution infrastructure (WWTP, solid waste landfills etc.) Identification of point and diffuse sources of pollution at the catchment level to prioritise the environmental and health risks Construction of new WWTPs and solid waste landfills – Bahr Al Baqar drain
Reduction and control of industrial pollution	 Assessment of industrial pollution sources discharging in sewer network - Alexandria West Wastewater Treatment Plant, in Bahr Al Baqar drain and in the Nile catchment area

EGYPT - Summary of national and regional activities in the MedProgramme

National activities	
Reduction of mercury releases	None
Other activities	Capacity building
Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge management, for consideration in the Barcelona Convention framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities	
Coastal Zone	Preparation of Egypt's National ICZM Strategy, relying on the
Management	implementation of Climagine participatory approach
	 Scoping to assess existing state and to agree on key issues and priorities Establishing governance mechanism for planning Engaging stakeholders through Climagine Diagnostic analysis to deeply understand the root causes of
	 the key issues and to build argumentation for policy solutions Validation and developing indicators with Climagine Future scenarios and the agreement on the vision
	 Designing the future strategy
	 Validating proposed measures and finalizing Climagine and the National ICZM Strategy
	 National assessment to support ratification of the ICZM Protocol
	Stakeholder consultation to support ratification of the ICZM Protocol
Management of	For the North West Coast Aguifer:
Coastal Aquifers and Related Ecosystems	 In-depth assessment and characterization of the aquifer through the application of a multi-disciplinary indicator-based methodology Identification and evaluation of coastal aquifer and ecosystems services

	 Analyses of saline intrusion processes National Dialogues identifying potential conjunctive management solutions Preparation of coastal aquifer management plan Aquifer monitoring multi-purpose networks and protocols designed and field tested, and responsible personnel trained
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Regional Assessment of Submarine Groundwater Discharges (Activities under Output 2.4) Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface and groundwater management (Activity 2.2.3) Gender training on sex-disaggregated water data collection (Activity 2.2.4)
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)			
Nexus assessments, related capacity building and institutional support	In three priority coastal areas: Nexus assessments conducted Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment			
Communication and outreach	 Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas 			

Regional activities	
Nexus assessments, related capacity building and institutional support	Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	 Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

	Regional activities
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	 PCBs disposal (up to 140 tonnes stocks, 90 tonnes dichlorination and 360 tonnes in use equipment; sites to be specified)
Remediation	 Remediation interventions considered for priority sites (PCBs contamination) – Bauchrieh, Qadisha and on contaminated sites by PFOS-PFAS (survey and sampling)
Prevention	 Options for prevention of mercury assessed (1. "Hospitals Free of Mercury" – Proposed Target: 1 tonne mercury prevented. 2. "Dentists Free of Mercury" – No target yet.) Options for prevention of new POPs assessed (1. "PFOS-PFAS Free Fire-Fighting" and/or 2. "HBCD Free EPS/XPS" (pending confirmation of Ministry's agreement, eligibility and further assessment)).
Other activities Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

National activities	
WWTP extension and upgrade (incl. reuse)	None
Depollution of catchment areas	 Technical assistance for wastewater system operation Definition of water resources management options with all stakeholders at the watershed level to guarantee sustainable use of resources
Reduction and control of industrial pollution	Assessment of industrial pollution sources, data-base and GIS
Reduction of mercury releases	None
Other activities	Improve environmental control & monitoring capacity by setting up a monitoring unit
Regional activities	

Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge management, for consideration in the BC framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities		
Coastal Zone	•	Preparation of Lebanon's National ICZM Strategy, relying on the
Management		implementation of Climagine participatory approach
		 Scoping to assess existing state and to agree on key issues and priorities
		 Establishing governance mechanism for planning
		 Engaging stakeholders through Climagine
		 Diagnostic analysis to deeply understand the root causes of the key issues and to build argumentation for policy solutions
		 Validation and developing indicators with Climagine
		Future scenarios and the agreement on the vision
		 Designing the future strategy
		 Validating proposed measures and finalizing Climagine and
		the National ICZM Strategy
	•	Preparation of the Integrated Resources Management Plan for the
		Damour Region, applying the Integrative Methodological Framework
		developed under the MedPartnership, and the Climagine participatory
		approach
		 Scoping report to describe the generally understood conditions
		of the plan area and to agree on priorities
		 Establishing governance mechanism for planning
		 Engaging stakeholders through Climagine
		 Diagnostic analysis to deeply understand the root causes of
		the key issues and to build argumentation for policy solutions
		 Validation and developing indicators with Climagine
		 Future scenarios and the agreement on the vision
		 Designing the future plan

	 Validating proposed measures and finalizing Climagine and the IRM Plan 	
	 National assessment to support implementation of the ICZM Protocol Stakeholder consultation to support implementation of the ICZM Protocol National consultation to support the launch of an Inter-Ministerial 	
	Committee	
Management of Coastal Aquifers and Related Ecosystems	 For the Damour Coastal Aquifer: In-depth assessment and characterization of the aquifer through the application of a multi-disciplinary indicator-based methodology Identification and evaluation of coastal aquifer and ecosystems services Analyses of saline intrusion processes National Dialogues identifying potential conjunctive management solutions Preparation of coastal aquifer management plan Aquifer monitoring multi-purpose networks and protocols 	
	designed and field tested, and responsible personnel trained	
Regional activities	, , , ,	
Coastal Zone	Participation in the sub-regional training in support of ICZM Protocol	
Management	implementation	
	 Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events 	
Management of	Groundwater submarine discharge-related activities:	
Coastal Aquifers	Regional Assessment of Submarine Groundwater Discharges	
and Related Ecosystems	 (Activities under Output 2.4) Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) 	
	 Joint regional training modules on conjunctive surface water and 	
	groundwater management	
-	Gender training on sex-disaggregated water data collection	
Programme-wide	Sharing of best practices as contribution to MedProgramme-wide	
communication	Knowledge Management Strategy	
and knowledge management	 Contribution of data and active use of the MedProgramme Knowledge Management Platform 	
management	Participation in IW LEARN events	

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)
Nexus	In three priority coastal areas:
assessments,	 Nexus assessments conducted
related capacity building and institutional support	 Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment
Communication and outreach	Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas
Regional activities	
Nexus assessments, related capacity building and institutional support	 Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

Regional activities		
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice 	

Coordination and synergies	•	Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects
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Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

Coastal Zone	 National assessment to support ratification of the ICZM Protocol 		
Management	realistical deceasion in the support realised of the realist realist		
Management of	None		
Coastal Aquifers			
and Related			
Ecosystems			
Regional activities			
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding 		
	coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast		
	 Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events 		
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) 		
	 Joint regional training modules on conjunctive surface water and groundwater management 		
	Gender training on sex-disaggregated water data collection		
Programme-wide	 Sharing of best practices as contribution to MedProgramme-wide 		
communication	Knowledge Management Strategy		
and knowledge management	 Contribution of data and active use of the MedProgramme Knowledge Management Platform 		
	Participation in IW LEARN events		

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)
Nexus	In three priority coastal areas:
assessments,	 Nexus assessments conducted
related capacity building and institutional support	 Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment
Communication and outreach	Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas
Regional activities	
Nexus assessments, related capacity building and institutional support	 Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 3. Protecting Marine Biodiversity

Child Project 3.1 "Management Support and Expansion of Marine Protected Areas in Libya"

National activities

Inventory of marine and coastal sites of conservation interest in Libya

- At least one field survey conducted to identify and characterize marine and coastal sites of conservation interest in Libya, and submitted for approval
- Marine megafauna monitoring performed in at least two sites

Strengthening the governance of marine protected areas

- Libya's Strategy on Marine Protected Areas (MPAs) is developed and submitted for approval
- A draft law on MPAs is development and submitted for approval
- A governance structure for MPAs in Libya is designed and made operational in at least one MPA

Effective management of MPAs

- MPA management unit established in at least one on-site
- MPA management plan elaborated for at least one site

Civil society engagement

- One CSO participatory platform established to encourage CSO participation in the management of MPAs
- At least five CSOs involved in MPA establishment and management participatory processes

Capacity building

 At least four training events on MPA governance, sustainable management, stakeholder engagement and Marine megafauna monitoring organized for conservation groups, representatives of fisheries and tourism, and government stakeholders

Awareness raising and communication

- At least four awareness raising campaigns designed and launched, targeting the general public, fisheries, tourism, coastal management and/or urban planners
- Engagement in the MedProgramme Knowledge Strategy, including sharing of lessons learned, providing data to feed the Knowledge Management platform
- Participation in IW LEARN events, communities of practice, etc.

Knowledge sharing and dissemination of results

- Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy
- Contribution of data and active use of the MedProgramme Knowledge Management Platform
- Participation in IW LEARN events, IW communities of practice

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

	Regional activities
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

GEF Special Climate Change Fund Project (SCCF Project)

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

Stakeholder engagement, capacity building and cooperation	 Training on climate change adaptation solutions, including ecosystem-based solutions, for technical experts and decision makers Sub-regional workshops for international finance institutions, and the banking, insurance and private sectors to enhance the use of coastal climate risk and vulnerability in investment decisions
Access to financing mechanisms for climate change adaptation	 Development of methodological guidelines on preparation of financing plans for climate change adaptation in coastal areas including domestic, international and private sector investments Countries invited to participate in the development of a full-fledged project proposal to access international financing support for climate change adaptation in coastal zones
Knowledge management, communication and coordination	 Regional meeting to share knowledge and lessons learned, and to discuss opportunities for replication at the national level in additional countries Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	 Potential for PCBs disposal considered (coordination with GEF/ UNDP) Assessment study for Bijela Shipyard
Remediation	None
Prevention	None
Other activities	None
Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge, for consideration in the Barcelona Convention framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities Coastal Zone	None (synergy with SCCF Project, where climate change adaptation will
Management	be mainstreamed into local coastal planning processes for the Kotor Bay area)
Management of Coastal Aquifers and Related Ecosystems	 For the Buna - Bojana Transboundary Coastal Aquifer (in cooperation with Albania): In-depth assessment and characterization of the aquifer through the application of a multi-disciplinary indicator-based methodology (Activity 2.1.1) Identification and evaluation of coastal aquifer and ecosystems services (Activity 2.1.2) Analyses of saline intrusion processes (Activity 2.1.3) National Dialogues identifying potential conjunctive management solutions (Activities under Output 2.4) Preparation of coastal aquifer management plan (Activities under Output 2.5) Aquifer monitoring multi-purpose networks and protocols designed and field tested, and responsible personnel trained (Activities under Output 2.6)
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Regional Assessment of Submarine Groundwater Discharges Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface water and groundwater management Gender training on sex-disaggregated water data collection
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities (specific countries to be identified during t	the 2018 consultations)
Nexus In three priority coastal areas:	
assessments, • Nexus assessments conducted	
related capacity • Nexus strategies or action plans of puilding and relevant stakeholders, with gender	
institutional • Establishment of nexus committe	
support interministerial or cross-sectoral of	
 Training events on the nexus appr local administrations and other ke 	oach delivered to national and
 Nexus demonstration activities de 	•
reduce tension among the compe	ting water uses identified in the
nexus assessment Communication • Engagement in the national Information	
Communication • Engagement in the national Information and outreach Strategy in the three priority coastal are	
Regional activities	edS
Nexus • Three nexus regional dialogue meeting	as and one partnership
assessments, conference organized to build countrie	
related capacity approach and foster relationships with	
building and	•
institutional	
support	
 Identification of Three project fiches prepared for prior 	
bankable nexus investments in collaboration with inter	
interventions for consideration to governments and institutions	international financing
Programme-wide • Engagement in the Regional Informati	on Communication and Outreach
communication Strategy for CP 2.2	
and knowledge • Engagement in the MedProgramme K	nowledge Management Strategy
management and replication activities	
Participation in IW LEARN events, com	nmunities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

	Regional activities
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

GEF Special Climate Change Fund Project (SCCF Project)

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

National activities	
Stakeholder engagement, capacity building and cooperation	 A gender-sensitive climate risk assessment undertaken through a stakeholder-led process to provide sufficient basis for building coastal resilience to climate change and sustainability Solutions identified for building coastal resilience and sustainability though stakeholder involvement, using the participatory approach methodology Climagine
Mainstreaming climate change adaptation in coastal planning	 Preparation of guidelines on mainstreaming climate change adaptation in the appropriate local coastal planning processes in the Kotor Bay area (synergy with CP 2.1 of the MedProgramme) Evaluation of the legal, policy and institutional barriers for implementing solutions to mitigate climate risks
Regional activities	
Stakeholder engagement, capacity building and cooperation	 Training on climate change adaptation solutions, including ecosystem-based solutions, for technical experts and decision makers Sub-regional workshops for international finance institutions, and the banking, insurance and private sectors to enhance the use of coastal climate risk and vulnerability in investment decisions
Access to financing mechanisms for	 Development of methodological guidelines on preparation of financing plans for climate change adaptation in coastal areas including domestic, international and private sector investments

climate change adaptation	 Countries invited to participate in the development of a full-fledged project proposal to access international financing support for climate change adaptation in coastal zones
Knowledge management, communication and coordination	 Regional meeting to share knowledge and lessons learned, and to discuss opportunities for replication at the national level in additional countries Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	 Mercury disposal options considered – COELMA, Tétouan (in coordination with EIB/ Child 1.2)
Remediation	None
Prevention	 Options for prevention of mercury assessed (1. "Hospitals Free of Mercury" – Possible target: 1 tonne mercury prevented. 2. "Dentists Free of Mercury" – No target yet (pending confirmation of Ministry's agreement on pilot). Options for prevention of new POPs assessed (1. "PFOS-PFAS Free Fire-Fighting". 2. "HBCD Free EPS/XPS" and/or 3. "SCCP Free PVC" or "SCCP Free Lubricants" (pending confirmation of Ministry's agreement, eligibility and further assessment.
Other activities	None
Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

National activities	
WWTP extension and upgrade (incl. reuse)	None
Depollution of catchment areas	Decommissioning of COELMA chlor-alkali plant in Tétouan, removal of mercury stocks (in conjunction with Child 1.1), soil and sediment decontamination in valley where applicable
Reduction and control of industrial pollution	None
Reduction of mercury releases	 Decommissioning of COELMA chlor-alkali plant and potential process conversion to membrane process
Other activities	Capacity building

Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge management, for consideration in the BC framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities	
Coastal Zone Management	 Preparation of the ICZM Plan for the Tanger-Tétouan-Al Hociema Region, relying on the implementation of Climagine participatory approach (synergy with SCCF Project, where climate change adaptation will be mainstreamed into this plan) Scoping report to describe the generally understood conditions of the plan area and to agree on priorities Establishing governance mechanism for planning Engaging stakeholders through Climagine Diagnostic analysis to deeply understand the root causes of the key issues and to build argumentation for policy solutions Validation and developing indicators with Climagine Future scenarios and the agreement on the vision Designing the future plan Validating proposed measures and finalizing Climagine and the ICZM Plan National assessment to support implementation of the ICZM Protocol Stakeholder consultation to support implementation of the ICZM Protocol Coast Day central celebration dedicated to coastal resilience
Management of Coastal Aquifers and Related Ecosystems	For the Rhiss Nekkor Coastal Aquifer: In-depth assessment and characterization of the aquifer through the application of a multi-disciplinary indicator-based methodology Identification and evaluation of coastal aquifer and ecosystems services Analyses of saline intrusion processes

	 National Dialogues identifying potential conjunctive management solutions Preparation of coastal aquifer management plan Aquifer monitoring multi-purpose networks and protocols designed and field tested, and responsible personnel trained
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Regional Assessment of Submarine Groundwater Discharges Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface water and groundwater management Gender training on sex-disaggregated water data collection
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)
Nexus	In three priority coastal areas:
assessments, related capacity building and institutional support	 Nexus assessments conducted Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment
Communication and outreach	 Engagement in the national Information Communication and Outreach Strategy in the three priority coastal areas
Regional activities	

Nexus assessments, related capacity building and institutional support	Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers
Identification of bankable nexus interventions	 Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions
Programme-wide communication and knowledge management	 Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2 Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

	Regional activities
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice
Coordination and synergies	Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects

MOROCCO - Summary of national and regional activities in the MedProgramme

GEF Special Climate Change Fund Project (SCCF Project)

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

National activities	
Stakeholder engagement, capacity building and cooperation	 In the Tanger-Tétouan-Al Hociema region: A gender-sensitive climate risk assessment undertaken through a stakeholder-led process to provide sufficient basis for building coastal resilience to climate change and sustainability Solutions identified for building coastal resilience and sustainability though stakeholder involvement, using the participatory approach methodology Climagine
Mainstreaming climate change adaptation in coastal planning	 Preparation of guidelines on mainstreaming climate change adaptation in the coastal plan for the Tanger-Tétouan-Al Hociema region (synergy with CP 2.1 of the MedProgramme) Evaluation of the legal, policy and institutional barriers for implementing solutions to mitigate climate risks
Regional activities	
Stakeholder engagement, capacity building and cooperation	 Training on climate change adaptation solutions, including ecosystem-based solutions, for technical experts and decision makers Sub-regional workshops for international finance institutions, and the banking, insurance and private sectors to enhance the use of coastal climate risk and vulnerability in investment decisions
Access to financing mechanisms for climate change adaptation	 Development of methodological guidelines on preparation of financing plans for climate change adaptation in coastal areas including domestic, international and private sector investments Countries invited to participate in the development of a full-fledged project proposal to access international financing support for climate change adaptation in coastal zones
Knowledge management, communication and coordination	 Regional meeting to share knowledge and lessons learned, and to discuss opportunities for replication at the national level in additional countries Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

TUNISIA - Summary of national and regional activities in the MedProgramme

Component 1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

National activities	
Disposal	 PCBs disposal (sites and quantities to be determined) Disposal of POPs others than PCBs (sites and quantities to be determined) Mercury disposal options assessed – SNCPA, Kasserine (in coordination with EIB/ Child 1.2)
Remediation	 Small-scale interventions considered for priority sites contaminated with POPs/ PCBs
Prevention	 Mercury prevention options assessed (1. "Hospital Free of Mercury" – Possible target: 1 tonne mercury prevented. 2. "Dentists Free of Mercury" – no target yet (pending confirmation of Ministry's agreement on pilot). Options for prevention of new POPs assessed (1. "PFOS-PFAS Free Fire-Fighting". 2. "HBCB Free EPS/XPS" and/or 3. "SCCP Free Lubricants" (pending confirmation of Ministry's agreement, eligibility and further assessment).
Other activities	None
Regional activities	
Measuring progress to impacts	 TDA update Improved integration and sharing of the existing research and monitoring data
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

National activities	
WWTP extension and upgrade (incl.	 Extension and upgrade of 10 wastewater treatment plants (WWTP) in different cities nationwide including feasibility studies
reuse)	•
Depollution of	 Site mercury depollution – SNCPA Kasserine
catchment areas	 Preparation of wastewater management masterplans in regions concerned by the 10 WWTP
Reduction and control of industrial pollution	None
Reduction of mercury releases	 Mercury disposal options assessed – SNCPA, Kasserine (in coordination with EIB/ Child 1.1) Site mercury depollution – SNCPA Kasserine

TUNISIA - Summary of national and regional activities in the MedProgramme

National activities	
Other activities	None
Regional activities	
Environmental standards	 Development of regional standards on desalination, aquaculture and wastewater and sludge management, for consideration in the BC framework
Knowledge sharing and dissemination of results	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events, IW and CW communities of practice

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Due to the dynamic nature of the potential project pipeline for this Child Project, it is not possible at this stage to identify specific sites for EBRD's interventions. Activities will be agreed upon with the countries in due course, based on EBRD's investment criteria and the expected results set forth in the Programme Framework Document for the MedProgramme.

Component 2. Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

National activities		
Coastal Zone Management	National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol National consultation to support the launch of an Inter-Ministerial Committee	
Management of Coastal Aquifers and Related Ecosystems	 For the Ras Jebel Coastal Aquifer: In-depth assessment and characterization of the aquifer through the application of a multi-disciplinary indicator-based methodology Identification and evaluation of coastal aquifer and ecosystems services Analyses of saline intrusion processes National Dialogues identifying potential conjunctive management solutions Preparation of coastal aquifer management plan Aquifer monitoring multi-purpose networks and protocols designed and field tested, and responsible personnel trained 	
Regional activities		
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of national capacities, strengths and gaps regarding coastal observation, to feed into a conceptual framework and structure for a coastal observation system to support the implementation of 	

TUNISIA - Summary of national and regional activities in the MedProgramme

	 ICZM processes at national and local levels and to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	 Groundwater submarine discharge-related activities: Regional Assessment of Submarine Groundwater Discharges Two regional workshops for training and capacity-building on submarine groundwater discharge (English and French speaking countries) Joint regional training modules on conjunctive surface water and groundwater management Gender training on sex-disaggregated water data collection
Programme-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

National activities	(specific countries to be identified during the 2018 consultations)	
Nexus	In three priority coastal areas:	
assessments,	 Nexus assessments conducted 	
related capacity building and institutional support	 Nexus strategies or action plans developed in collaboration with relevant stakeholders, with gender mainstreamed throughout Establishment of nexus committees (building on new or existing interministerial or cross-sectoral committees) Training events on the nexus approach delivered to national and local administrations and other key stakeholders Nexus demonstration activities designed and implemented to reduce tension among the competing water uses identified in the nexus assessment 	
Communication • Engagement in the national Information Communication and Outreach		
and outreach Strategy in the three priority coastal areas		
Regional activities		
Nexus assessments, related capacity building and institutional support	 Three nexus regional dialogue meetings and one partnership conference organized to build countries' capacity on the nexus approach and foster relationships with potential financiers 	
Identification of bankable nexus interventions	Three project fiches prepared for priority nexus interventions and/or investments in collaboration with interested countries and submitted for consideration to governments and international financing institutions	

TUNISIA - Summary of national and regional activities in the MedProgramme

Programme-wide communication	•	Engagement in the Regional Information Communication and Outreach Strategy for CP 2.2
and knowledge management	•	Engagement in the MedProgramme Knowledge Management Strategy and replication activities Participation in IW LEARN events, communities of practice, etc.

Component 4. Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environmental and Climate Regional Support Project"

Regional activities		
Knowledge sharing and dissemination of results	 Cooperation in the identification and sharing of lessons learned and successful policies and practices (in support of the preparation of GEF Experience Notes, scientific publications,) Contribution of thematic content for communications on MedProgramme results, designed for modern dissemination tools (programme website, videos, social media campaigns, international media coverage, YouTube, etc.) Regular use of the MedProgramme Bulletin (published every six months) to remain informed of the results of all Child Projects Contribution to IW LEARN website and events, as well as global IW and CW communities of practice 	
Coordination and synergies	 Participation in yearly stocktaking meetings with all Child Projects and countries, implementing and execution agencies, GEF, and other regional stakeholders, in view of generating synergies among the Child Projects 	

TUNISIA - Summary of national and regional activities in the MedProgramme

GEF Special Climate Change Fund Project (SCCF Project)

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

Regional activities			
Stakeholder engagement, capacity building and cooperation	 Training on climate change adaptation solutions, including ecosystem-based solutions, for technical experts and decision makers Sub-regional workshops for international finance institutions, and the banking, insurance and private sectors to enhance the use of coastal climate risk and vulnerability in investment decisions 		
Access to financing mechanisms for climate change adaptation	 Development of methodological guidelines on preparation of financing plans for climate change adaptation in coastal areas including domestic, international and private sector investments Countries invited to participate in the development of a full-fledged project proposal to access international financing support for climate change adaptation in coastal zones 		
Knowledge management, communication and coordination	 Regional meeting to share knowledge and lessons learned, and to discuss opportunities for replication at the national level in additional countries Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW LEARN events 		



















The Mediterranean Sea Programme (MedProgramme):

Enhancing Environmental Security

Report of the Second Regional Consultation

Paris, France 20 and 21 September 2018



Photo credit : Chloé Meyer (UNESCO IHP) and Lucilla Minelli (UN Environment/MAP)

Final version 25 October 2018

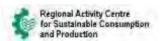
























MedProgramme Report of the Second Regional Consultation

(Paris, France – 20 and 21 September 2018)

Conclusions

- 1. The GEF Operational Focal Points (or their representatives) of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UN Environment/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (MedPCU).
- 2. Following final comments from the GEF Operational Focal Points and the UN Environment Project Review Committee (PRC), Child Project 2.1 and the SCCF Project will be submitted to the GEF for endorsement in October 2018.
- 3. Child Projects 1.1, 1.2, 1.3, 2.2, 3.1 and 4.1 will be submitted to the GEF for endorsement between October and December 2018.

Next	t steps		
	Action item	Responsibility	Deadline
1.	Circulate links to project documents and substantive annexes for Child Project 2.1 and the SCCF Project via DropBox	UN Environment/MAP	21/09/2018
2.	Circulate link to presentations via DropBox	UN Environment/MAP	21/09/2018
3.	Provide deadlines for comments on Child Project 2.1 and the SCCF Project	UN Environment/MAP	24/09/2018
4.	Initiate discussions with the GEF Operational Focal Points on co-financing for Child Projects 1.1, 2.2 and 3.1	UN Environment/MAP	24/09/2018
5.	Prepare and circulate draft report of the 2 nd Regional Consultation	UN Environment/MAP	28/09/2018
6.	Provide the list of national focal points for the UN Environment/MAP Regional Activity Centres to GEF Operational Focal Points	UN Environment/MAP	28/09/2018
7.	Provide Knowledge Management and Gender Mainstreaming Strategies to GEF Operational Focal Points and all partners for comments	UN Environment/MAP	08/10/2018
8.	Provide advanced draft of Child Project 4.1 to GEF Operational Focal Points and all partners for comments	UN Environment/MAP	15/10/2018
9.	Submit co-financing letters for Child Projects 1.1, 2.2 and 3.1	GEF Operational Focal Points	31/10/2018

Background information

- 1. The Second Regional Consultation was organized by the Coordinating Unit of the UN Environment Mediterranean Action Plan (UN Environment/MAP) and the implementing and executing agencies of the MedProgramme to update the GEF Operational Focal Points about progress on the preparation of the Child Projects, to present the main features of the MedProgramme's overarching strategies for Knowledge Management and Gender Mainstreaming, and to agree on the next steps for the finalization of all project documents prior to their submission to the GEF for endorsement. The agenda of the Second Regional Consultation is provided in Annex 1.
- 2. The objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The MedProgramme was endorsed by the GEF Council in October 2016 with seven Child Projects contributing to the GEF's focal areas of International Waters (IW), Chemicals and Waste (CW), and Biodiversity (BD) (Table 1). An additional project financed by the GEF's Special Climate Change Fund (SCCF) was subsequently developed and is now also considered one of the Child Projects of the MedProgramme, in support of the GEF focal area on Climate Change (CC). Hence, there is a total of eight Child Projects in the MedProgramme.
- 3. Nine countries have endorsed the MedProgramme: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia. It will be executed over a period of five years starting in 2019.

Table 1 Overview of the MedProgramme components, Child Projects, Executing Agencies and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)				
MedProgramme Component	Child Project	Indicative lists of executing Agencies	GEF Focal Areas	
1. Reduction of Land Based Pollution In	1.1 Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts.	UN Environment/MAP	IW and CW	
Priority Coastal Hotspots, and	1.2 Mediterranean Pollution Hot Spots Investment Project.	EIB, UN Environment/MAP	IW and CW	
measuring progress to impacts	1.3 Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC).	EBRD, UN Environment/MAP	IW and CW	
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone	2.1 Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection.	UN Environment/MAP, PAP/RAC, Plan Bleu, UNESCO-IHP, GWP Med	IW	
	2.2 Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS.	GWP Med, UN Environment/MAP	IW	
	SCCF Project: Enhancing Regional Adaptation to Climate Change in	UN Environment/MAP, PAP/RAC, Plan Bleu, GWP Med	CC	

	Mediterranean Marine and Coastal Areas.		
3. Protecting Marine Biodiversity	3.1 Management Support and Expansion of Marine Protected Areas in Libya.	UN Environment/MAP IUCN, SPA/RAC WWF Med	BD
4. Knowledge Management and Programme Coordination	4.1 Mediterranean Sea LME Environment and Climate Regional Support Project.	UN Environment/MAP	IW and CW

Attendance

- 4. The Second Regional Consultation brought together 50 participants, including representatives from eight of the nine countries that endorsed the MedProgramme and all 11 of the implementing and executing agencies. Also in attendance were representatives of the Permanent Delegations to UNESCO of Albania, Egypt, Lebanon, Montenegro and Tunisia. The complete list of participants is set forth in Annex 2.
- 5. The names, titles and affiliations of the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia (or their nominated representatives) that participated in the regional consultation are provided in Table 2.

Table 2 Names, titles and affiliations of the GEF Operational Focal Points and the nominated representatives that participated in the Second Regional Consultation for the MedProgramme

Country	Representative(s)	Title and affiliation
Albania	Ms. Jula Selmani	Chief of Projects Unit, National Agency of Protected
		Areas, Ministry of Tourism and Environment
Algeria	Ms. Samira Hamidi*	Inspectrice Centrale de l'Environnement et du
		Développement Durable, Ministère des Ressources
		en Eau et de l'Environnement, Direction Générale de
		l'Environnement et du Développement Durable
Bosnia and	Mr. Senad Oprašic*	Head of Environmental Protection Department,
Herzegovina		Ministry of Foreign Trade and Economic Relations
Egypt	Mrs. Abir Abu Zeid	Undersecretary for International Cooperation and
		Technical Assistance at EEAA, Ministry of
		International Cooperation
Lebanon	Ms. Olfat Hamdan	Head of Protection of Urban Environment
		Department, Ministry of Environment
Libya	Mr. Mustafa Soliman*	Management Committee Member, Environment
		General Authority
Montenegro	Ms. Ivana Stojanovic	Advisor, Department for Mediterranean Affairs,
		Ministry of Sustainable Development and Tourism
Tunisia	Mr. Karim Sahnoun	Directeur du suivi des conventions et des projets de
		coopération avec les partenaires étrangers, Direction
		Générale des Relations Extérieures, Ministère des
		Affaires Locales et de l'Environnement

^{*} GEF Operational Focal Point

Presentations

- 6. Presentations were delivered for the eight Child Projects of the MedProgramme, as well as a progress report on the preparation of all projects and interventions on the development of the MedProgramme's overarching strategies for Knowledge Management and Gender Mainstreaming. The present report does not attempt to summarize these presentations, but focuses rather on the discussions they prompted.
- 7. All of the presentations delivered during the Second Regional Consultation are available at: https://www.dropbox.com/sh/544agsnimsbag3m/AAB9dRSpwR9Ur5qRkTzNpP0_a?dl=0.

Welcoming remarks and initial discussions

- 8. Ms. Alice Aureli, Chief of the Section on Groundwater Systems and Settlements at UNESCO's International Hydrological Programme (IHP), welcomed participants on behalf of UNESCO and declared that the preparation of the MedProgramme was an excellent example of effective collaboration between countries, UN organizations, nongovernmental organizations and associations. Ms. Aureli recalled that implementing solutions to the complex environmental challenges in the Mediterranean will require a multi-sector, multi-disciplinary strategy, consistent with the programmatic approach used in the design of the MedProgramme.
- 9. Mr. Gaetano Leone, Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat, welcomed participants and thanked UNESCO for hosting the event. Mr. Leone observed that the decision to prepare a multi-focal area programme with the GEF had been a risk, but one that was carefully considered and necessary to amplify the positive impacts of the work of the many stakeholders in the region that had joined forces in 2016 to realize a collective vision: "A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse contributing to sustainable development for the benefit of present and future generations". Mr. Leone recalled that the MedProgramme builds on the work undertaken in the region by the Contracting Parties, the UN Environment/MAP Regional Activity Centres and other partners, as well as on the foundations of an important set of tools developed in the framework of the Barcelona Convention, including its Protocols, the Transboundary Diagnostic Analysis, and regional and national action plans, amongst others. Mr. Leone recognized the GEF for its twenty years of investments in the region, many of which directly supported these activities. In closing, Mr. Leone informed participants that significant progress had been made since the First Regional Consultation in March 2018, noting that two Child Projects of the MedProgramme are ready for submission to the GEF, that two additional Child Projects are nearing finalization, and that the remaining four Child Projects will be completed by the close of 2018.
- 10. Mr. Yegor Volovic, the UN Environment GEF Portfolio Manager for International Waters (IW), declared that the MedProgramme was one of UN Environment's flagship initiatives due to its wide-reaching activities, its innovative programmatic approach, and its ability to convene a diverse set of stakeholders to design interventions on the ground, including international finance institutions, development banks, the MAP system with its Regional Activity Centres, and technical experts. He recalled that the implementation of actions on the ground represents one of the key comparative advantages of UN Environment and the Regional Seas Programme (RSP) that it administers. Mr. Volovic noted that the Barcelona Convention and the Mediterranean Action Plan, which form the legal and policy framework for the MedProgramme, were developed in the context of the RSP for the Mediterranean, one of the first that was established.

11. Ms. Eloise Touni, the UN Environment GEF Task Manager for Chemicals and Waste (CW), recalled that the MedProgramme's activities on CW would support countries in efforts to meet their commitments on Persistent Organic Pollutants (POPs) and mercury under the Stockholm, Basel and Minamata Conventions and announced the corresponding targets for the MedProgramme: removal of 50 tons of mercury and 3,250 tons of POPs. In terms of progress with the development of the MedProgramme's CW activities, Ms. Touni informed participants that quantities of wastes had been confirmed in the participating countries and that life cycle analyses had been undertaken to identify strategies for the prevention of new wastes, especially the new POPs recently added to the Stockholm Convention. Ms. Touni also highlighted a challenge concerning the mercury removal activities intended to assist countries meet obligations under the Minamata Convention: since the Convention only recently entered into force, many countries have still not ratified it, thereby affecting their ability to take part in the mercury removal activities foreseen under the MedProgramme. Ms. Touni asked the representatives of the participating countries to indicate any assistance they may require to ratify the Minamata Convention, and offered the full support of UN Environment in this regard.

<u>Day 1 Agenda Item 1: GEF and the Mediterranean – 20 years of support, and expectations under GEF-7</u>

- 12. Mr. Steffen Hansen, Environmental Specialist on International Waters for the Europe and Central Asia regional team at the GEF Secretariat (hereafter the representative of the GEF Secretariat), reconfirmed that the MedProgramme is a flagship for the GEF in the region and outlined the interventions leading up to its development that the GEF had financed in the Mediterranean over the past 20 years. These have included the preparation of the previous Transboundary Diagnostic Analyses (TDAs) and of the Strategic Action Programmes on pollution (SAP MED) and biodiversity (SAP BIO) in the Mediterranean. He noted that several factors were creating momentum that will increase the MedProgramme's chances for success, including the update by countries of their National Action Plans (NAPs) for the prevention of land-based pollution; the scaling up of these action plans; and capacity building for institutional reforms. Responding to an earlier statement about the risk involved in developing an ambitious multi-focal area programme, the representative of the GEF Secretariat recalled that the GEF is committed to doing "what is difficult, what might fail" but to ensure that this process leads to positive results for countries.
- 13. In 2018, countries pledged US\$ 4.1 billion for the seventh replenishment of the Global Environmental Facility (GEF) trust fund. This new four-year investment cycle (GEF-7) will provide funds to protect the planet and human wellbeing through activities in the GEF focal areas of Biodiversity, Chemicals and Waste, Climate Change, International Waters, Land Degradation, and through other programs.
- 14. The GEF has set three strategic objectives for the International Waters focal area under GEF-7: (i) strengthening the Blue Economy opportunities, (ii) improving management in the Areas Beyond National Jurisdiction, and (iii) enhancing water security in freshwater ecosystems. Enhancing water security is one of the primary objectives of the MedProgramme, and is reflected in the Child Projects of Component 2 and the activities to promote the sustainable management of coastal aquifers, integrated water resources management, adaptation to climate change, and the nexus approach for evaluating competing demands for water, energy, food and ecosystem goods and services.
- 15. Further information about the GEF-7 programming framework and the associated global environmental benefits can be found in the GEF Council Document GEF/R.7/19 GEF-7 Replenishment Programming Directions.

Day 1 Agenda Item 2: Remarks from the Permanent Delegations to UNESCO

- 16. The representative of UNESCO IHP opened the floor to interventions from the Permanent Delegations to UNESCO, recalling that one of the assets of UNESCO's participation in the MedProgramme was its direct voice with the representatives of the countries, who will be able to support implementation of the programme by providing information and facilitating contacts with institutions, scientist and technicians.
- 17. H. E. Mr. Ferit Hoxha, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Albania to UNESCO, thanked the partners of the MedProgramme for their work to protect the MedIterranean Sea and its coastal areas, and confirmed that the activities of the MedProgramme would assist Albania in its efforts to achieve progress through sustainable development and protection of the environment. The Ambassador recalled that Albania was facing increasing risks associated with climate change and natural hazards and that the country's coastal zone was most vulnerable to these risks, which were affecting water supplies, agriculture and tourism in these areas. The Ambassador also cited a number of expectations for the MedProgramme, including strong coordination, effective exchange of information and opportunities for capacity building, increased resilience to climate change in coastal communities, assistance with the management of groundwater resources, and the protection of biodiversity.
- 18. H. E. Ms. Dragica Ponorac, Ambassador Extraordinary and Plenipotentiary of Montenegro to France, Permanent Delegate of Montenegro to UNESCO, also thanked the partners and expressed Montenegro's satisfaction with participating in the MedProgramme. The Ambassador underlined the importance of the MedProgramme to Montenegro, which is currently working to meet its obligations under Chapter 27 (Environment) for its accession to the European Union (EU), which will require more than US\$ 1.7 billion in investments. The Ambassador reminded participants that Montenegro is defined as an ecological state in its Constitution, and reiterated the country's commitment to meet the objectives of the MedProgramme especially through the activities foreseen in the hotspot areas of the Kotor Bay and the Bijela shipyard.
- 19. H.E. Mr. Ghazi Gherairi, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Tunisia to UNESCO, thanked the partners for their collaboration to implement the MedProgramme, and expressed appreciation for the fact that the programme will address the role of the environment in ensuring security. The Ambassador noted that the overarching challenge for the region is to transmit a healthy Mediterranean to the next generation, and that Tunisia is aware of the stakes at hand and has placed environmental values at the heart of its strategy of growth for the future. The Ambassador also took the opportunity to recognize the IHP for its work with the Government of Tunisia. In closing, the Ambassador pledged the willingness of the Government of Tunisia to provide the tools necessary for the success of the MedProgramme.
- 20. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat thanked the ambassadors for their remarks and recalled that the MedProgramme is being prepared under the leadership of the participating countries and that their guidance is important to move the programme towards success. The Coordinator highlighted that all participating countries of the MedProgramme are Contracting Parties of the Barcelona Convention, and many are participating in the Bureau including Egypt, Montenegro and Tunisia as well as Albania which currently holds the presidency. In closing, the Coordinator expressed gratitude to all countries present and contributing to the MedProgramme.

Day 1 Agenda Item 3: Setting the scene and objectives of the consultation

- 21. Mr. Lorenzo Galbiati, Project Pool Manager at the UN Environment/MAP-Barcelona Convention Secretariat (hereafter the Secretariat), reviewed the agenda of the consultation with participants and outlined the main objectives of the two-day event: (i) update the GEF Operational Focal Points on the status of the development of all Child Projects; (ii) request their feedback on outstanding issues; (iii) agree on the next steps for finalization of the preparation phase of the MedProgramme; and (iv) present the main features of the Knowledge Management and Gender Mainstreaming Strategies that will be applied to all Child Projects.
- 22. The Secretariat recalled that the MedProgramme builds on the strong foundations established in the region from more than US\$ 70 million in investments from the GEF over 20 years for activities supporting the implementation of the Barcelona Convention. These investments have led to the development of the initial Transboundary Diagnostic Analysis for the Mediterranean Large Marine Ecosystem (TDA-MED) as well as its 2005 update and 2015 supplement on coastal aquifers; Strategic Action Programmes to Address Pollution from Land-based Activities (SAP-MED) and for the Conservation of Biological Diversity (SAP-BIO), as well as their associated National Action Plans (NAPs); and the Protocol on Integrated Coastal Zone Management (ICZM).
- 23. The Secretariat also informed the participants about the delays encountered in the development of the Child Projects and explained that the period for submission to the GEF would be extended to December 2018. However, this should not affect the anticipated initiation of execution of the MedProgramme, which is foreseen in the first or second quarter of 2019.

<u>Day 1 Agenda Item 4: Progress report on preparation of the MedProgramme Child Projects and their submission to the GEF</u>

24. The Secretariat provided the milestones of the MedProgramme (Figure 1), an update on the status of action items from the First Regional Consultation in March 2018 (Table 3), the status of the development of each of the Child Projects (Table 4), the national and regional consultations foreseen between October and December 2018 (Table 5), the schedule for the completion of the preparation phase of the MedProgramme (Table 6) and the tentative timeline for the initiation of activities (Table 7).



Figure 1 Milestones of the MedProgramme (2016 – 2019)

Table 3 Status of action items from First Regional Consultation for the MedProgramme

	Action item	Responsibility	Status
1.	An overview of national and regional activities in each country	UN Environment/MAP	Complete
2.	A responsibility matrix for the executing structure of each Child Project	UN Environment/MAP	Complete
3.	Contact information for all implementing and executing partners	UN Environment/MAP	Complete
4.	Instructions on the preparation of co-financing letters	UN Environment/MAP	Complete
5.	An overview of national stakeholders engaged during project preparation	UN Environment/MAP	Ongoing
6.	A list of national thematic experts for CW and IW that will review project documents	GEF Operational Focal Points	Complete
7.	Letters of co-financing for Child Projects 1.2, 2.1 and 4.1	GEF Operational Focal Points	7 of 9 received
8.	Support the GEF Operational Focal Points in the identification of initiatives that can constitute cofinancing contributions to the Child Projects	Executing partners	Complete
9.	Provide letters of co-financing for Child Projects 1.2, 2.1 and 4.1	Executing partners	Complete

Table 4 Status of the development of the Child Projects (CP) of the MedProgramme

Project	Draft application	Final application	Anticipated	Anticipated
	package complete?	package complete?	timeframe for	timeframe for
	(Yes/No)	(Yes/No)	PRC ¹	submission to GEF
CP 1.1	Yes	No	November 2018	December 2018
CP 1.2	Yes	No	November 2018	November 2018
CP 1.3	Yes	No	(Not applicable)	December 2018
CP 2.1	Yes	Yes	October 2018	October 2018
SCCF	Yes	Yes	October 2018	October 2018
CP 2.2	Yes	No	December 2018	December 2018
CP 3.1	Yes	No	December 2018	December 2018
CP 4.1	Yes	No	November 2018	November 2018

Table 5 National and regional consultations foreseen between October and December 2018

Project	Type of consultation	Timeframe
CP 1.1	Virtual (comments gathered via email)	November 2018
CP 1.2	Virtual (comments gathered via email)	October 2018
CP 1.3	Virtual (comments gathered via email)	December 2018
CP 2.2	Regional meeting for all countries	November 2018
CP 2.2	Virtual (comments gathered via email)	December 2018
CP 3.1	National meeting	October 2018
CP 4.1	Virtual (comments gathered via email)	October 2018

Table 6 Schedule for the completion of the preparation phase of the MedProgramme

Timeframe	Actions
September – December 2018	Finalize all application packages
	Complete all PRCs
	Submit all application packages to GEF for review
	Obtain GEF CEO endorsement
	 Prepare all final reports and expenditure statements for PPG
January - March 2019	• Close all legal agreements for PPG phase with
	implementing and executing partners
	Formal closure of the PPG phase

9

¹ PRC: UN Environment's Project Review Committee, the internal review undertaken for all GEF projects prior to their submission to the GEF Secretariat for CEO endorsement. EBRD, as an implementing agency for the GEF, is not subject to this review.

Table 7 Tentative timeline for the initiation of activities of the MedProgramme

Timeframe	Actions
November – December 2018	Establish the legal and procedural frameworks for the
	Programme execution
	Evaluate needs for the new legal agreements that will be
	established with implementing and executing partners,
	national institutions, etc.
	Prepare terms of reference for staff that will be involved in
	the Programme
January - March 2019	Establish new legal agreements
	Set an operative budget in the UN Environment Enterprise
	Resource Planning System (Umoja)
	Allocate funds for each Child Project
April – June 2019	Initiate preparation of the inception report and workshop
	Arrange consultations with the countries
	Staff the Child Projects

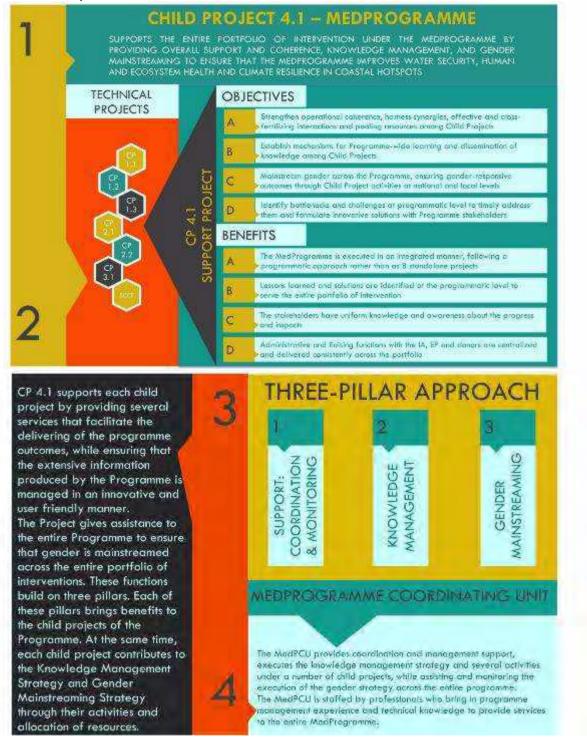
- 25. Ms. Olfat Hamdan, the representative of the GEF Operational Focal Point of Lebanon (hereafter the representative of Lebanon), inquired about one of the action items from the First National Consultation, namely the nomination by the GEF Operational Focal Points of national CW and IW focal points, indicating that Lebanon had not provided this information. The Secretariat informed that the selection of national focal points for CW and IW for the purposes of the MedProgramme was an internal matter for each country, and that all communications from the Secretariat regarding project development would continue to be directed to the GEF Operational Focal Point. As agreed at the First Regional Consultation, the GEF Operational Focal Point will coordinate the review of project documents with their national experts and provide a single set of comments to the executing agency that is responsible for the preparation of the Child Project.
- 26. Mr. Karim Sahnoun, the representative of the GEF Operational Focal Point of Tunisia (hereafter the representative of Tunisia), asked for clarification about the national activities for Child Project 2.2 presented in the overview of national and regional activities of the Child Projects for each country. Mr. Dimitris Faloutsos, Deputy Regional Coordinator of GWP Med, the leading executing agency for this Child Project, explained that a nexus assessment for the North West Sahara aquifer was foreseen in the context of a project funded by Sida, and that this assessment would contribute to the overall results of Child Project 2.2, but that no GEF funds would be used to finance national level activities in Tunisia for this Child Project.

Day 1 Agenda Item 5: Update on Child Project 4.1

27. Child Project 4.1 will play a key role in the MedProgramme, as it will: (i) monitor the progress of the entire portfolio of projects towards the programme's overarching goal of enhancing environmental security, and (ii) provide essential support functions to all Child Projects of the MedProgramme through three main lines of action: coordination and monitoring; knowledge management; and gender mainstreaming. In addition, Child Project 4.1 will produce technical activities, including the development of databases, the implementation of the Knowledge Management Strategy, as well as preparation of communication materials and the Annual Stocktaking Meetings. A conceptual overview of the objectives, benefits and structure of Child Project 4.1 is provided in Figure 2.

28. The project document and substantive annexes for Child Project 4.1 will be provided to the GEF Operational Focal Points and the partners for comments by 15 October.

Figure 2 Infographic on the objectives, benefits and structure of Child Project 4.1 (Credit: Debasmita Boral)



29. The Secretariat emphasized that the development of programme-level strategies for knowledge management and gender mainstreaming has not been attempted before in the context of a GEF programmatic approach, and therefore represents an important innovation

- for the GEF portfolio. These strategies for the MedProgramme will be provided to the GEF Operational Focal Points and the partners by 8 October for comments.
- 30. The representative of Lebanon confirmed that Child Project 4.1 has an important role in the MedProgramme, especially for overall coordination and to identify synergies with other initiatives and projects at the regional and international level. The representative of Lebanon then asked for clarification about the link between the MedProgramme Coordinating Unit (MedPCU) and the implementation of activities at the national level. The Secretariat explained that the national activities will be developed by the executing partners of the corresponding Child Projects and that the MedPCU in the framework of Child Project 4.1 will monitor progress on all Child Projects and help them to promote their knowledge tools at the level of the programme, in addition to providing other services. The specific modalities for execution of national level activities will be discussed during the inception phase of each Child Project. The Secretariat emphasized that the execution of activities with the relevant national and subnational institutions for all countries will be coordinated by the executing partners (the approach successfully used in the MedPartnership) and that there was no expectation for the governments of the participating countries to create a national coordination structure for the MedProgramme.
- 31. Ms. Ivana Stojanovic, the representative of the GEF Operational Focal Point of Montenegro (hereafter the representative of Montenegro), expressed support for the cross-cutting approach proposed for the design of Child Project 4.1 and thanked the partners for reflecting the national priorities of Montenegro in the design of Child Project 2.1 and the SCCF Project. Making reference to the activities of Child Project 2.1 on coastal observation, the representative of Montenegro expressed her point of view about how these activities could be linked to Child Project 4.1. Given that the Child Project 2.1 could not address Montenegro's priority related to the development of a coastal database and observatory with the aim of connecting relevant stakeholders and managers of coastal data, Child Project 4.1 is therefore seen as an opportunity to assist the country with this request (in the context of the execution of the Knowledge Management Strategy and its development of knowledge tools).
- 32. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat declared that a centralized approach to knowledge management for the MedProgramme would be more effective and yield more positive impacts than the decentralized approach employed for the MedPartnership, and stated that the knowledge management platform foreseen under Child Project 4.1 would be important to the MAP system during and after the lifespan of the MedProgramme.
- 33. Mr. Mohamad Kayyal, MED POL Programme Management Officer, observed that the management function of the MedPCU in Child Project 4.1 had been underemphasized with respect to coordination services, and that this management function would require significant efforts across the various Child Projects. The Secretariat explained that this was provided for in the design of the MedPCU, which would ensure traditional management functions for the Child Projects (such as establishment of legal agreements, financial management and procurement), as well as monitoring functions to measure progress to impacts and to prepare the Project Implementation Reports (PIR) of each Child Project for the GEF. The Project Management Cost (PMC) of each Child Project will support the overall management, coordination and monitoring functions delivered by the MedPCU. It was also noted that the MedPCU will execute technical activities under the Child Projects 2.1, 2.2, 3.1 and 4.1 as well as the SCCF Project. This is not the case for the Child Projects 1.1 and 1.2 where dedicated and specific technical assistance will be identified and supported by the project grants for the execution of the activities.

34. Prof. Michael Scoullos, the Chair of GWP Med, recognized the important step taken by the designers of the MedProgramme to coordinate knowledge in the region, and noted the challenge of harnessing all the knowledge generated by activities on the ground in many countries and with many partners. Prof. Scoullos asked what could be done to facilitate the understanding of the countries about the locations of activities and the potential for synergies. The Secretariat indicated that relevant information on this point would be provided during the presentation on the MedProgramme's Knowledge Management Strategy.

<u>Day 1 Agenda Item 6 – Knowledge Management in the MedProgramme</u>

- 35. Ms. Lucilla Minelli, the Knowledge Management Expert for the preparatory phase of the MedProgramme, recalled that the overall objective for the Knowledge Management Strategy (KM Strategy) is to "provide a structured and centralized approach to leverage and share knowledge assets generated by the Child Projects of the MedProgramme with the intended beneficiaries and audiences." The KM Strategy was developed through analysis of the Programme Framework Document and background documentation, surveys, exchanges with project designers, desk studies, and contact with relevant technical counterparts regarding performance and functionality of information technologies.
- 36. The representative of Lebanon recognized that a diverse set of ideas and activities must be accounted for under the KM Strategy and that it will be important to develop indicators to track the progress towards operational objectives and targets associated with specific knowledge management activities. The Secretariat explained that objectives and activities had been established for knowledge management and that an appropriate number of indicators for these would be reflected in the design of Child Project 4.1. The Secretariat reminded the participants, however, that the decision to implement a KM Strategy represents an additional task that goes above and beyond what is required by the Programme Framework Document approved by the GEF for the MedProgramme.
- 37. The Chair of GWP Med urged the Secretariat to ensure that the knowledge management tools of the MedProgramme are tailored to the needs of policy makers in particular, and not only to those of the coordinating and/or executing agencies. This sentiment was reiterated by Ms. Daria Povh Skugor, Senior Programme Officer at the Priority Actions Programme Regional Activity Centre (PAP/RAC), who also inquired about the source of the human and financial resources that would be necessary to implement the KM Strategy. The Secretariat confirmed that governments and policy makers are the primary client for the knowledge tools of the MedProgramme, and that the MedProgramme will dedicate sufficient resources to operationalize the strategy, including through the recruitment of a knowledge management expert for the MedPCU and through trainings for partners on how to generate and package data. The Secretariat reminded participants that the KM Strategy is modular in nature, and will start with simple tools and expand to meet the needs of the programme.
- 38. The representative of the GEF Secretariat noted that the KM Strategy represents an effective tool for the GEF to distill results from the MedProgramme, and asked if the knowledge products of the MedPartnership could be further disseminated via the Knowledge Management Platform, especially to private sector stakeholders. The Knowledge Management Expert confirmed that the results of the MedPartnership would be promoted on the platform, and that the private sector was a targeted audience and beneficiary of the KM Strategy, as well as a potential provider of knowledge. The Secretariat indicated that efforts could be made under the MedProgramme to create partnerships with the private sector.
- 39. The Chair of GWP Med added that the private sector holds a great amount of data (sometimes of higher quality than that of governments) and recommended that efforts be taken from the

onset of the MedProgramme to clearly define the requirements for data gathering, to determine with countries what data can be shared, and with whom. The representative of UNESCO IHP recalled that in the context of the Barcelona Convention stakeholders have rights to seek data from the private sector, and that the MedProgramme could support these efforts by creating awareness and encouraging the private sector to communicate more.

- 40. The Secretariat informed participants that the Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona Convention would be considered in the design of the Knowledge Management Platform, and that relevant data from the MedProgramme would be integrated in the IMAP platform.
- 41. Ms. Abir Abu Zeid, the representative of the GEF Operational Focal Point of Egypt (hereafter the representative of Egypt), expressed satisfaction with the KM Strategy and its goal to integrate all projects and share lessons across the programme, adding that this will be important for all countries. In response to her question about how data would be collected at the national level, the Secretariat explained that the executing partner of each Child Project will have resources to develop activities with the countries and to support national institutions, and that each Child Project will have a dedicated budget for knowledge management activities to produce and manage harmonized data specific to the focus of each Child Project. This includes if appropriate, the use of raw data on specific issues provided by national institutions to contribute to the MedProgramme KM Strategy. The Secretariat reassured participants that data could be shared in an aggregated manner, but that raw data belonging to the countries would not be made available unless the owners of the data agreed to this.

Day 1 Agenda Item 7: Coordination with IW:LEARN and LME:LEARN

- 42. Mr. Mish Hamid, Project Manager for the GEF International Waters Learning Exchange and Resources Network (IW:LEARN), recalled that the IW:LEARN platform was created to provide knowledge management services to the GEF's International Waters project managers, since International Waters is the only GEF focal area for which an overarching convention or agreement does not exist. LME:LEARN is a cousin initiative of IW:LEARN, providing services to GEF IW projects in coastal and marine areas, with the goal of strengthening global governance of Large Marine Ecosystems (LME). Mr. Hamid outlined the main services of these initiatives, including knowledge sharing and partnership building, information management, programmatic support, and training (biennial International Waters Conferences, GEF project twinnings, ...). Further information on both initiatives is available at https://iwlearn.net/.
- 43. The Secretariat confirmed that the outputs of the Child Projects of the MedProgramme will feed into the IW:LEARN platform, and that information exchanges with IW:LEARN and LME:LEARN are foreseen in the KM Strategy.

<u>Day 1 Agenda Item 8: Gender Mainstreaming in the MedProgramme</u>

44. Ms. Debasmita Boral, the Gender Expert for the preparatory phase of the MedProgramme, provided a brief history of the evolution of gender considerations in development policies and described the benefits of gender mainstreaming before presenting the MedProgramme's Gender Mainstreaming (GM) Strategy. The GM Strategy comprises three lines of action: (i) address gender-blind hurdles with gender-differentiated consequences; (ii) mitigate gender-specific barriers and discriminatory norms; and (iii) scale up gender-sensitive policies and deliver gender-responsive outcomes. The MedProgramme is operationalizing the GM Strategy in the preparatory phase by conducting tailored gender assessments and preparing

- costed gender action plans for each Child Project. Specific activities on gender will be defined and approved during the inception phase with all stakeholders.
- 45. The Secretariat recalled that Child Project 4.1 will ensure overall monitoring of the implementation of the GM Strategy and that executing partners will receive training on how to mainstream gender in project activities.
- 46. The Chair of GWP Med suggested that in some cases, project activities should also be designed to consider the specific needs of marginalized groups, in addition to considerations for gender.

Day 1 Agenda Item 9: Update on Child Project 2.1

- 47. Child Project 2.1 encompasses activities on Integrated Coastal Zone Management (ICZM), protection of coastal aquifers and groundwater-related ecosystems, as well as integrated management of water resources management, including conjunctive management of surface water and groundwater resources. A joint presentation on the development of the project and its activities was made by representatives of the four executing partners: PAP/RAC (Ms. Daria Povh), Plan Bleu (Mr. Antoine Lafitte), GWP Med (Mr. Dimitris Faloutsos) and UNESCO IHP (Mr. Youssef Filali-Meknassi).
- 48. Mr. Amr Abdallah Morsy, First Secretary of the Permanent Delegation of the Arabic Republic of Egypt to UNESCO, informed the Secretariat that the Government of Egypt will provide written comments to IHP to be reflected in the final version of the project document for Child Project 2.1.
- 49. The representative of Lebanon also indicated that Lebanon would provide comments on the project document and furthermore asked for clarification on the activities foreseen in the Damour area of Lebanon, including on the management approach that would be employed for the Damour area and on responsibilities for the implementation of the management that will be produced for this area. The executing partners confirmed that a river basin management approach will be used in the design of an integrated resources management plan for the Damour area (taking into account upstream activities that affect the coast) and that the implementation of the plan will be the responsibility of the country.
- 50. The representative of Montenegro raised a concern about one of the activities of Child Project 2.1 foreseen in Montenegro, "Preparation of the Management Plan for the Buna-Bojana Transboundary Aquifer", noting that the title of this plan was similar to the existing plan for the Buna-Bojana area prepared under the MedPartnership. The Secretariat promised to address this concern in the final project document, based on the comments that the representative of Montenegro will provide.
- 51. Ms. Samira Hamidi, the GEF Operational Focal Point of Algeria (hereafter the representative of Algeria) expressed a wish to see more reference in the project document to the activities on ICZM already undertaken in Algeria (preparation of a coastal strategy and a coastal plan for the Reghaia area) and to discuss the possibility of having activities on ICZM in Algeria that were more concrete than those described in the project document (support for ratification of the ICZM Protocol). The representative of PAP/RAC recalled that the adoption of the ICZM tools already developed in Algeria would support the adoption of the ICZM Protocol, and that efforts would be made to seek additional investments to support Algeria in this work. The Secretariat clarified that no promises could be made however at this stage about the development of bankable projects and access to loans under the activities of Child Project 2.1.

Day 1 Agenda Item 10: Update on the GEF Special Climate Change Fund (SCCF) Project

52. Mr. Matthew Lagod, Consultant for UN Environment/MAP, outlined the progress achieved on the preparation of the SCCF Project and its activities. The SCCF Project will enhance regional adaptation to climate change in Mediterranean marine and coastal areas through four lines of action: (i) stakeholder engagement and capacity building; (ii) application of best practices for climate resilience in the coastal zone; (iii) access to climate financing mechanisms; and (iv) knowledge management and project coordination. The project document for the SCCF Project is complete and will be submitted to UN Environment's Project Review Committee in October 2018.

Day 2 Agenda Item 1: Update on Child Project 1.1

- 53. A joint presentation on the development the Child Project 1.1 and its activities was made by representatives of the implementing and executing agencies - Ms. Eloise Touni of the Chemicals and Health Branch/ GEF Team at UN Environment and Ms. Marina Markovic of the UN Environment/ MAP - MED POL. Project activities under the CW component are designed to remove existing stockpiles of persistent organic pollutants (POPs) and mercury, and to prevent the generation of new wastes containing these pollutants. Disposal activities will be carried out in two phases. Phase 1 will target stockpiles verified during the current preparation phase of the project as being ready for immediate disposal, and Phase 2 will entail further inventories and data gathering to identify the remaining stockpiles that can be eliminated to meet the project's disposal targets. Prevention activities will focus on strategies for avoiding further generation of wastes containing mercury and two types of new POPs (PFOS and HBCD). An additional set of activities will be undertaken under the IW project component to produce an updated TDA for the Mediterranean (including gender assessment), a report on progress to impacts, a data sharing policy and an offshore monitoring strategy. The project document for Child Project 1.1 will be submitted to the GEF for endorsement in December 2018.
- 54. The representative of Lebanon inquired about the modalities for implementation of the activities, whether the new POPs targeted under the project could be expanded to include other chemicals (such as SCCP, a priority chemical for Lebanon), and also about how countries had been consulted about the International Waters (IW) activities. In terms of implementation modalities, Ms. Touni explained for each Phase 1 disposal site an environmental management plan (EMP) would be developed to establish responsibilities, identify national capacities and determine the need to bring in outside assistance. Regarding the possibility of considering additional new POPs for prevention activities. Ms. Touni indicated that it could be discussed, but recalled the existing proposals for Lebanon were designed to address the POPs identified in the country's NIP. Regarding the consultations on the IW activities, Ms. Markovic explained the meetings organized within the MAP system were used to consult the Contracting Parties of the Barcelona Convention (on, for example, national needs for IMAP - Integrated Monitoring and Assessment Programme - implementation, indicators and other relevant topics); proceedings of such meetings were used as a starting point in developing relevant sections of the project document. The Secretariat reconfirmed that the countries would have ample opportunity to review and comment on the project document prior to its submission to the GEF.
- 55. The representative of Egypt recalled that Egypt had expressed interest in participating in the national project activities, and had recently provided UN Environment with its NIP, the list of relevant national institutions and an indication of candidate companies for the development of prevention pilots. The representative of Egypt inquired about how the country could catch

up to the others in the project, about the possibility of reinforcing national capacities, and about the criteria for allocation of funds to the countries. She also expressed interest to receive more information on the forums used to consult the countries on the needs for the development of IW activities, in particular proceedings of the meeting held in July 2018 in Rome on the IMAP implementation. Ms. Touni, taking the questions in turn, explained that Egypt could not participate in Phase 1 for disposal but that this may be possible for Phase 2. In terms of enhancing national capacities, the EMP process for each disposal site will include an assessment of national capacities, and national experts will gain expertise by participating in execution of the EMP and inspection activities under the supervision of UN Environment consultants. Criteria for allocation of resources to priority sites is based on the presence of verified stockpiles that are ready for immediate disposal and also on the co-financing contribution that countries may bring to dispose additional quantities of waste. Priorities for disposal sites will be reviewed each year during the project's steering committee. Finally, Ms. Markovic assured that the requested information on the Rome meeting deliberations will be shared with the Government of Egypt.

- 56. The representative of Algeria underlined the importance of the project to the Government of Algeria, its wish to participate in the activities on mercury disposal and its need for capacity building with respect to mercury elimination and implementation of its NAP (National Action Plan). The representative of Algeria also informed participants that experts from UN Environment were currently being hosted in Algeria for a technical mission for the project and that all necessary information would be provided.
- 57. The representative of Montenegro confirmed that Montenegro's priorities for the project were well represented in the activities considered for the project, while inquiring whether the priorities for Phase 2 had been confirmed and expressing interest for hearing about possible synergies with Child Project 1.3. Ms. Touni responded that the project document would not make reference to sites for Phase 2. The first step of Phase 2 will be to confirm the presence of the chemicals reported in the national inventories/ accounted for in the project document, followed by decisions about site selection during the second or third steering committee meetings.
- 58. Mr. Roland Weber, Associated Expert of SCP/RAC, called on the GEF to consider activities on POPs that were not in NIPs but that were particularly dangerous, difficult and expensive to remove, and which are seriously affecting drinking water supplies.

Day 2 Agenda Item 2: Update on Child Project 1.2

- 59. Mr. Mark Pevsner, Senior Advisor Strategy and Coordination Division Advisory Services Department/Projects Directorate of the European Investment Bank (EIB), explained that the primary objective of Child Project 1.2 is to prepare investments for physical infrastructure projects to reduce the discharges of untreated or partially treated wastewater that impact the sea. The target countries for Child Project 1.2 are Egypt, Lebanon and Tunisia, and the project document is nearly complete. The representative of UN Environment/ MAP MED POL, Ms. Markovic, presented a component of the project that will support development of regional standards (wastewater management, sludge management, desalinization and aduaculture) for consideration and adoption by the Contracting Parties of the Barcelona Convention.
- 60. The representative of Tunisia recalled the country's strong involvement in the project. He asked about developments related to his recommendation (expressed at the First Consultation meeting from March 2018) for a coordinated approach in the implementation of the activities on mercury in Child Projects 1.1 and 1.2, including how Tunisia would benefit from these. Ms. Touni explained that analysis was ongoing about whether mercury activities

originally foreseen under Child Project 1.2 would be taken up by Child Project 1.1, whereas Child Project 1.1 is not aiming to facilitate access to investments for decontamination, but rather focuses on removal of mercury from those countries that had ratified the Minamata Convention. Child Project 1.1 activities in Tunisia will thus be limited to removal of mercury stockpiles. The representative of EIB added that EIB would consider granting a loan for any well-prepared project on mercury decontamination that a country was prepared to undertake. The Secretariat recalled that the priorities of the Child Projects are set in the Programme Framework Document for the MedProgramme approved by the GEF in 2016, and that the first priority is to meet the targets set forth therein for disposal/removal and co-financing.

- 61. The representative of Lebanon indicated that the country has an important need for wastewater projects and capacity building in this domain, and asked for capacity building activities to be included in the project. Regarding the regional standards to be developed under the project, the representative of Lebanon emphasized the high relevance of regional wastewater and sludge management standards for her country. As regards desalination, the advice was to also take into account/address small and medium sized enterprises in Lebanon and their small-scale desalination capacities.
- 62. The Chair of GWP Med stated that the Mediterranean region needed active encouragement to shift towards non-conventional water resources, and considered that the regional standards to be developed under the project could contribute to this shift. Ms. Maria Diamanti, Environmental Expert of EIB, agreed that water reuse is important but noted that society's perception of this was poor. EIB works to raise awareness about the quality of treated wastewater, but ultimately it is a country's choice to encourage acceptance for the use of treated wastewater. As water becomes more scarce, the public's opinion about the use of treated wastewater may change. The Chair of GWP Med noted that there has been a rapid shift in the mentality of people regarding non-conventional water resources including through efforts of religious leaders that have expressed support for the use of these kinds of water resources and that the partners and countries of the MedProgramme should collectively step up efforts to encourage the use of these resources.

Day 2 Agenda Item 3: Update on Child Project 1.3

- 63. Two representatives of European Bank for Reconstruction and Development (EBRD) Ms. Astrid Motta, Principal, Energy Efficiency and Climate Change, and Ms. Claudia Neuschulz, Analyst presented the progress on the development of activities for Child Project 1.3, which is designed to reduce land-based sources of pollution in hotspots through a combination of technical assistance and investment grants to rehabilitate wastewater treatment plants and increase the volume of wastewater treated in the region. Under the CW component of the project, activities are being developed aiming to reduce and prevent 1,250 t of POPs. Like UN Environment, EBRD is an accredited GEF agency and has its own modalities for project preparation. EBRD intends to submit the project document for Child Project 1.3 to the GEF by December 2018.
- 64. Two examples of existing on-the-ground support from EBRB were presented. The first is a technology transfer platform designed to assist countries adopt best technologies; EBRD provides a loan to the countries to finance the implementation of the technology and countries later recover up to 25% of the loan from grants. The second example is an infrastructure project preparation facility.
- 65. The representative of Egypt inquired about the business model for the implementation of Child Project 1.3. Ms. Motta indicated that the project will be implemented through a combination of technical assistance and investment grants. EBRD assists companies to

identify the best technologies for their needs and proposes loans to enable companies to finance implementation of these technologies (for example to shift to PBC-free production methods, to promote water efficiency, ...). Following successful implementation of the technologies, EBRD will reimburse a portion of the implementation cost. Countries are eligible for this assistance only if they are bankable (i.e., able to borrow money).

- 66. The representative of Lebanon asked for clarification about the specific activities foreseen in the project. The Secretariat responded that a portfolio of potential investments will be developed during the project preparation phase, but that it was not possible to commit to specific investments at present. The Secretariat also recalled that EBRD is an implementing agency of the GEF and as a development bank, has different working modalities than UN Environment regarding budgeting, reporting and execution of activities. In the MedProgramme, EBRD will also have its own project management budget which is separate from that of UN Environment. The management of projects in the UN Environment portfolio will be ensured through Child Project 4.1.
- 67. In response to a question from the representative of Egypt, the Secretariat clarified that the GEF funds provided for Child Project 1.3 are not for loans but rather for pre-investment studies to prepare investments. The representative of the GEF confirmed that the GEF provides seed money to institutions that can scale-up investments to deliver global environmental benefits.
- 68. The representative of Montenegro inquired about the consultations with countries for Child Project 1.3 that were announced during the First Regional Consultation, and indicated that the Government needed more details about activities (including on possible synergies between Child Projects 1.1 and 1.3) before preparing its letter of co-financing. The representative of EBRD explained that the consultations will take place in the coming weeks to inform the countries about the potential activities and the opportunities for investments/loans in the context of this project.
- 69. The representative of Tunisia asked whether the technical assistance activities of the project included pilot projects for the private sector to demonstrate the effectiveness of new technologies. The representative of EBRD confirmed that demonstration of new technologies is one of the key objectives for this work and that pilot projects could be financed.

Day 2 Agenda Item 4: Update on Child Project 3.1

- 70. Mr. Atef Limam, MedMPAnet Project Officer at SPA/RAC, described the main lines of action for Child Project 3.1, a project devoted to enhancing the management of Marine Protected Areas (MPAs) in Libya. These include capacity building for managers of MPAs in Libya, the revision of Libya's National Strategy on MPAs and its draft law on protected areas, and an inventory of marine and coastal sites of ecological importance. A consultation with Libyan stakeholders is planned for October 2018, and the project document will be submitted to the GEF in December 2018.
- 71. Mr. Mustafa Soliman, the GEF Operational Focal Point for Libya (hereafter the representative of Libya), indicated satisfaction with the proposed intervention in Libya and positive anticipation about the implementation of activities on the ground. Regarding the consultation with Libyan stakeholders, the representative of Libya indicated that his presence will be beneficial and that he will also extend the invitation to the Environment General Authority.
- 72. In response to a question raised about the possibility of MPAs imposing on navigation rights in the high seas, the representative of SPA/RAC confirmed that none of the MPAs in Libya are beyond national jurisdiction. However, efforts are underway in the context of the Barcelona

Convention to create a framework for the creation of MPAs that are beyond national jurisdiction.

Day 2 Agenda Item 5: Update on Child Project 2.2

73. Mr. Dimitris Faloutsos, Deputy Regional Coordinator of GWP Med, provided an overview of the design of activities for Child Project 2.2 and recalled its overarching objective: fostering water-food-energy security and the reduction of land based nutrient pollution and other pressures, through the adoption of the water-food-energy-ecosystems nexus approach. The project activities will follow four main lines of action: strengthening the capacities of institutions on the nexus approach; addressing nexus issues affecting the Mediterranean Sea LME; testing and upscaling nexus solutions; and engaging stakeholders in these processes. A consultation with the participating countries to confirm interest and priorities in the project will be organized in Beirut, Lebanon on the sidelines of the First MENA Nexus Roundtable that will take place from 26-28 November 2018.

Day 2 Agenda Item 6: Discussion

- 74. In summary, the representatives of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UN Environment/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (Med PCU).
- 75. Ms. Jula Selmani, the representative of the GEF Operational Focal Point of Albania (hereafter the representative of Albania), congratulated the partners and acknowledged the excellent quality of the workshop. She also indicated that although she had not been involved in the previous meetings and the development of the MedProgramme, she now had a clear vision of the process, thanks to the organization of the consultation. In closing, the representative of Albania declared that the strategy for the implementation of the MedProgramme appeared to be effective and would serve the needs of the countries.
- 76. The representative of Algeria asserted that the MedProgramme is an important opportunity for the region and predicted that it would result in success for countries and partners alike. She emphasized that the effective coordination among the countries and project partners during the preparation phase of the MedProgramme represented a positive start to the process. The representative of Algeria also announced that a coordination mechanism at the national level in Algeria will be implemented to ensure effective interaction with the regional coordination mechanism of the MedProgramme. In closing, the representative of Algeria confirmed that the country is committed to involving government institutions, the private sector and the media in the MedProgramme, and thanked the partners and the GEF for their assistance in depolluting the Mediterranean Sea.
- 77. Mr. Senad Oprašic, the GEF Operational Focal Point of Bosnia and Herzegovina (hereafter the representative of Bosnia and Herzegovina) thanked the partners for the excellent presentations and asserted that the two regional consultations had provided a solid foundation for the effective implementation of the projects of the MedProgramme. He furthermore recalled the priority that the Government of Bosnia and Herzegovina places on the alignment of all activities and results of the MedProgramme with national legislation, EU Directives and the requirements of EU acquis, as well as the SDGs. In closing, the

- representative of Bosnia and Herzegovina wished success to all partners for the implementation of activities, and thanked UNESCO for hosting the meeting.
- 78. The representative of Egypt thanked the partners for the meeting and confirmed that the presentations had provided a clear indication of the links between the projects and how the MedProgramme is being implemented in a holistic manner. She promised to work to ensure effective communication among national partners involved in the activities, and expressed satisfaction with the fact that the countries sharing the Mediterranean were sitting around the same table and working together for the common good of the Sea. In closing, the representative of Egypt indicated her interest in the implementation of the Knowledge Management and Gender Mainstreaming Strategies and indicated her belief that these will assist countries in dealing with environmental challenges.
- 79. The representative of Lebanon thanked the partners for a fruitful meeting and reconfirmed the country's commitment to contribute to the MedProgramme and to share the necessary knowledge and information to support its successful execution. She underlined the importance of involving national stakeholders, of ensuring effective coordination and management, and of seeking synergies in the MedProgramme. In closing, the representative of Lebanon expressed her satisfaction with the progress achieved to date, and her positive anticipation for the initiation of the activities of the MedProgramme.
- 80. The representative of Libya recognized the partners for the progress achieved on the preparation of the MedProgramme, and confirmed that the consultation had been extremely useful for gaining a deeper understanding of the activities and how they will be carried out. He furthermore expressed appreciation for the chance to cooperate with the other countries in the region on the protection of the Mediterranean Sea. At the same time, the representative of Libya shared his concern about the MedProgramme's integrated approach to environmental challenges spanning several GEF focal areas, indicating that this can complicate activities on the ground. In closing, the representative of Libya wished all the partners success in the execution of their activities.
- 81. The representative of Montenegro thanked the partners for the all the work completed to date, and recalled that one of the benefits of a regional programme is the opportunity for activities covering many thematic areas at both the national and regional levels, which has great value for the countries. She recalled that Montenegro is in the stage of pre-accession to the EU and does not have the resources to finance all the corresponding obligations, and that for this reason it is important to identify additional sources of assistance. Besides the MedProgramme, the Government of Montenegro is also participating in the GEF Adriatic Project and the UN Environment Vienna biodiversity assessment in coastal and marine areas. which will lead to the establishment of three new MPAs in Montenegro. The representative of Montenegro also highlighted the synergies that were identified during the design of the MedProgramme, and notably the integration of activities between Child Project 2.1 and the SCCF Project in Montenegro, maintaining that without a programmatic approach this kind of synergy and integration would not have occurred. In closing, the representative of Montenegro acknowledged the effectiveness of the programmatic approach in terms of communication with partners on the design of activities, and her interest in the future implementation of the Knowledge Management and the Gender Mainstreaming Strategies.
- 82. The representative of Tunisia thanked the MedProgramme team for the progress achieved on the preparation of the projects and recalled the contributions of Tunisia throughout the process. He also underlined the importance of initiating efforts to establish the implementing modalities at the national level with the relevant institutions to avoid delays and to ensure that the objectives of the MedProgramme are achieved. In closing, the representative of Tunisia

stressed the need to identify synergies and complementarities among the activities of the MedProgramme, and more importantly, with other ongoing and future initiative in the region, such as Horizon 2020 and post-Horizon 2020 activities.

Day 2 Agenda Item 7: Conclusions and closing of the meeting

- 83. The Secretariat presented the conclusions and next steps recorded during the proceedings of the Second Regional Consultation and asked the GEF Operational Focal Points (or their representatives) for their comments and approval. The GEF Operational Focal Points (or their representatives) endorsed these conclusions and approved the next steps, which appear on page 1 of the present report.
- 84. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat declared that the presentations and discussions had been illuminating and had helped to clarify for everyone once again the importance of the MedProgramme and the complex challenges that would be tackled by this ambitious and innovative joint initiative. He asserted that the overall level of buy-in and interest are high for the MedProgramme and assured that all the concerns raised by the Contracting Parties would be duly addressed in the final project documents, prior to their submission to the GEF Secretariat. The Coordinator thanked all participants for their continued commitment of energy, time and resources and expressed positive anticipation for the continued collaboration. In closing, the Coordinator recognized the contributions of the countries, the partners, the UN Environment team, the GEF and UNESCO, a gracious host for the event and an important partner of the programme.
- 85. The representative of UNESCO IHP expressed UNESCO's pleasure in hosting the participants of the consultation. Recalling that 21 September is the International Day of Peace, the representative of UNESCO IHP explained that people of all cultures and beliefs were present at UNESCO on this day to discuss peace, and declared that peace can also be built on science and environmental sustainability.
- 86. The Second Regional Consultation for the MedProgramme was closed at 17.00 on 21 September 2018.

Annex 1 Agenda of the Second Regional Consultation of the MedProgramme

Day 1: 20 September 2018		
9:00 - 9:30	Registration	
9:30 - 10:00	Welcoming remarks: UNESCO-IHP, UN Environment/MAP and UN	
	Environment/GEF	
10:00 – 10:15	1. GEF and the Mediterranean Sea: 20 years of support and expectations under GEF-7	
10:15 - 11:00	2. Remarks from the Permanent Delegations of UNESCO	
11:00 - 11:30	Coffee Break	
11:30 – 12:00	3. Setting the scene and objectives of the consultation: UN Environment/MAP	
12:00 – 12:30	4. Progress report on preparation of the MedProgramme Child Projects and on their submission to the GEF: UN Environment/MAP	
12:30 - 13:00	5. Update on Child Project 4.1: UN Environment/MAP	
13:00 - 14:30	Lunch	
14:30 – 15:00	6. Knowledge Management in the MedProgramme: UN Environment/MAP	
15:00 – 15:30	7. Coordination with the GEF's established knowledge management platforms: IW:LEARN and LME:LEARN	
15:30 - 16:00	8. Gender Mainstreaming in the MedProgramme: UN Environment/MAP	
16:00 - 16:15	Coffee Break	
16:15 – 17:00	9. Update on Child Project 2.1: GWP-Med, PAP/RAC, Plan Bleu and UNESCO-IHP	
17:00 – 17:30	10. Update on the GEF Special Climate Change Fund Project: UN Environment/MAP	
17:30- 17:45	11. Conclusions of Day 1	
17:45	End of Day 1	

	Day 2: 21 September 2018
9:00 - 9:15	Opening remarks: UN Environment/MAP
9:15 - 10:00	1. Update on Child Project 1.1: UN Environment/Chemicals and Waste,
	MED POL, SCP/RAC, Plan Bleu
10:00 - 10:45	2. Update on Child Project 1.2: EIB and MED POL
10:45 - 11:15	Coffee Break
11:15 – 12:00	3. Update on Child Project 1.3: EBRD
12:00 - 12:30	4. Update on Child Project 3.1: SPA/RAC, WWF and IUCN
12:30 - 14:00	Lunch
14:00 - 14:30	5. Update on Child Project 2.2: GWP-Med
14:30 - 16:00	6. Discussion:
	 Added-value of GEF programmatic approach;
	 Complementarities among the Child Projects;
	 Feedback from the GEF Operational Focal Points.
16:00 - 16:30	Coffee Break
16:30 - 17:00	7. Conclusions and closing of the meeting – UN Environment/MAP, UN
	Environment/GEF and UNESCO-IHP
17:00	End of the consultation

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GEF/UN Environment

"Mediterranean Sea Programme (MedProgramme)

Enhancing Environmental Security"

(2019- 2024)







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1. Overview and background

1.1 Purpose

The purpose of the present Knowledge Management (KM) strategy¹ is to offer a structured and integrated approach to leverage and systematically share knowledge assets generated by the Child Projects of the MedProgramme with the intended beneficiaries and audiences. In doing so, the strategy aims to maximize the MedProgramme's impact by: strengthening operational coherence; harnessing synergies and pooling resources, including time; inform policy makers and key stakeholders about the MedProgramme (its activities, needs, outputs, meetings, results, etc.) and of the benefits arising from the Programme interventions. It will also contribute to the objectives of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention), the Minamata Convention on Mercury and the Stockholm Convention on Persistent Organic Pollutants by fostering a broader culture of learning, cooperation and environmental sustainability in the region.

1.2 Context

The present KM strategy is designed to support the implementation of the GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (2019- 2024)2. The MedProgramme represents the first GEF programmatic multi-focal area initiative in the Mediterranean Sea aiming to operationalize priority actions to reduce major transboundary environmental stresses in its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The MedProgramme is implemented in nine beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. Its eight Child Projects³ cut across four different Focal Areas of the Global Environment Facility (International Waters [IW], Biodiversity [BD], Chemicals and Waste [CW], and Climate Change [CC]) and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, governmental and non-governmental bodies, industry, research, media, and various other organizations. It builds on the MedPartnership and ClimVar & ICZM⁴ GEF projects which have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries,

¹ The strategy is illustrated in relevant sections of MedProgramme Child Project 4.1. The full document is annexed to individual MedProgramme Child Project documents to provide a harmonized and consistent reference across the entire portfolio of interventions.

² GEF Lead Implementing Agency: UN Environment. Other GEF Implementing Agency: European Bank for Reconstruction and Development (EBRD). Leading Executing Agency: UN Environment/MAP. Executing partners: UNESCO International Hydrological Programme (IHP), European Investment Bank (EIB), Global Water Partnership – Mediterranean (GWP-Med), WWF Mediterranean Programme Office (WWF MedPO), IUCN, Priority Actions Programme Regional Activity Centre (PAP/RAC), Plan Bleu Regional Activity Centre (Plan Bleu), Specially Protected Areas Regional Activity Centre (SPA/RAC) and the Sustainable Consumption and Production Regional Activity Centre (SCP/RAC).

³ At the time of its approval in October 2016, the MedProgramme was comprised of seven Child Projects. Subsequently, a Mediterranean climate change adaptation project was developed by UN Environment/MAP for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF Secretariat that this SCCF project would be managed for all intents and purposes as an additional Child Project of the MedProgramme. Hence the reference to eight Child Projects of the MedProgramme.

⁴ More info on MedPartnership, ClimVar and ICZM (Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean) projects: http://www.themedpartnership.org/, https://iwlearn.net/iw-projects/2600 and https://iwlearn.net/iw-projects/3990. Some partners to the MedPartnership developed a series of dedicated websites for their activities. For instance, PAP/RAC activities on MedPartnership can be found at: https://pap-thecoastcentre.org/medpartnership; https://pap-thecoastcentre.org/climvar/ and https://pap-thecoastcentre.org/projects/

UN bodies, civil society organizations, bilateral donors and the European Union (EU); and tested on the ground the feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate related impacts.

The Mediterranean countries have worked together with GEF IW support since the late 1990s to set priorities related to national, as well as transboundary environmental concerns (Transboundary diagnostic analysis [TDA] for the Mediterranean Sea⁵) and have jointly agreed on the interventions needed to address these priorities in two Strategic Action Programmes (SAPs): 1) The Strategic Action Programme to Address Pollution from Land-Based Activities (SAP-MED); and 2) the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP-BIO).

Following the formal adoption by the Barcelona Convention of the SAP-MED and SAP-BIO (2005 and 2003), the Mediterranean countries translated the SAP priorities into National Action Plans (NAPs), and benefited from international support in moving towards on the ground implementation. The MedPartnership project (2010-2015) supported countries in the initial implementation of the SAPs and of the newly developed Protocol on Integrated Coastal Zone Management (ICZM), which was adopted in 2011.

More recently, the 2015 – 2016 update of the NAPs associated with the SAP-MED has succeeded in creating additional momentum at local, national and regional levels, with a remarkable level of involvement and participation of all stakeholders. In each country, national and local authorities, the industrial sector and Nongovernmental Organizations (NGOs) discussed priorities, possible actions and opportunities for investment thus making the NAPs a realistic initiative. These significant achievements, while not yet bringing about measurable changes in the levels of environmental stress or in degradation trends, have however created the indispensable foundation and the enabling conditions for initiating national actions targeting major causes of marine and coastal transboundary degradation. To confront the challenge of implementation, to execute the SAPs and to reinforce implementation of the NAPs thereby achieving concrete and lasting results, are the raisons d'être of MedProgramme.

The Barcelona Convention provides the policy framework under which the MedProgramme will operate and the UN Environment Mediterranean Action Plan (MAP) system will ultimately carry forward the legacy of the outcomes of the MedProgramme's Child Projects, and in particular of its knowledge management mechanisms, approaches and tools. The MAP Regional Activity Centers (RACs) will play a crucial role in sustaining and amplifying these efforts. Moreover, regular reporting to the Meeting of Contracting Parties to the Barcelona Convention on the progress made by the MedProgramme will be ensured through the UN Environment/Mediterranean Action Plan-Barcelona Convention Secretariat.

⁵ Transboundary diagnostic analysis (TDA) for the Mediterranean Sea, UNEP/MAP, 2005 - https://wedocs.unep.org/bitstream/handle/20.500.11822/598/medtda.pdf?sequence=2&isAllowed=y

Box 1 The Barcelona Convention and the MAP system

The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (referred to as the Barcelona Convention) is a regional convention adopted in 1976 to prevent and abate pollution from ships, aircraft and land-based sources in the Mediterranean Sea. It is developed under the UN Environment Regional Seas Programme which was established in 1974 with the scope of coordinating activities aimed at the protection of the marine environment through a regional approach. The Mediterranean Action Plan (MAP) was the first UN Environment initiative to be developed under the Programme and became the model for other seas across the globe. Since 1975, MAP has provided the institutional framework for cooperation in addressing common challenges of marine environmental degradation adopted by the Mediterranean States and the European Union.

There are 22 Contracting Parties (Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, the European Union, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey) and they decide on MAP strategies, budget and programme of work in pursuit of MAP's goal at their Ministerial level meetings, held every two years. They appoint Focal Points to review the progress of work and ensure the implementation of recommendations at the national level. A rotating Bureau of six representatives of the Contracting Parties guides and advises the MAP Secretariat (located in Athens) in the interim period between the biannual meetings.

More information on the Coordinating Unit for the Mediterranean Action Plan, Secretariat to the Barcelona Convention and its Protocols at: http://web.unep.org/unepmap/.

The Minamata Convention on Mercury⁶, the Stockholm Convention on Persistent Organic Pollutants⁷, the Basel Convention⁸ and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA)⁷ are also among the key guiding frameworks for the Child Projects focusing on reduction of land-based pollution (Component 1 of the MedProgramme).

In terms of knowledge management (KM), the MedProgramme holds a tremendous opportunity to generate new information and consciousness, encourage transboundary cooperation, scale up needed investments and raise general awareness about the benefits arising from good governance and management of natural resources in coastal areas.

The eight Child Projects (CP) of the MedProgramme are expected to deliver a set of complementary results embracing the categories of priorities identified by the TDA for the Mediterranean Sea which are translated into three components of the program: i) Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts; ii) Enhancing Sustainability and Climate Resilience in the Coastal Zone; and iii) Protecting Marine Biodiversity (see Table 2, MedProgramme Components, Child Projects and GEF Focal Areas, page 16).

⁶ The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. It entered into force on 16 August 2017. More info: http://www.mercuryconvention.org

⁷ The Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from May 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs). More info: http://chm.pops.int

⁸ The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is an international treaty that was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries (LDCs). The Convention was opened for signature on 22 March 1989 and entered into force on 5 May 1992. As of February 2018, 185 states and the European Union are parties to the Convention. More info: http://www.basel.int

⁹ The UNEP Global Programme of Action (UNEP/GPA) aims at preventing the degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment. It is unique in that it is the only global initiative directly addressing the connectivity between terrestrial, freshwater, coastal and marine ecosystems. More info: https://www.unenvironment.org/nairobiconvention/unep-global-programme-action-unepgpa

The fourth component (Knowledge Management and Programme Coordination) includes Child Project 4.1 "Mediterranean Sea LME Environment and Climate Regional Support Project" which plays a key role within the MedProgramme as it "implements mechanisms for Programme-wide learning and dissemination of knowledge, monitoring the Programme's progress to impacts, and fostering synergistic interactions among Child Projects". Within the GEF programmatic approaches there is a need to ensure programme coherence and impact through coordination among diverse sets of multi-focal area Child Projects contributing to the same programme outcomes. A Support Project functions as a trait d'union (a common link) among Child Projects by providing overall coordination of the programme portfolio, resource-saving services, a robust system to managing knowledge effectively and a sound action plan for gender mainstreaming.

The present strategy provides the context and the boundaries within which KM will operate in the MedProgramme, essentially answering the strategic questions: where are we now? (baseline and project needs), what do we want to achieve? (vision and objectives), and how to get there? (framework for processes, tools, activities and governance).

The present strategy does not aim to provide a final definition of the tools, software and instruments that will be used to reach its goals. Although a wide range of them is considered and analysed, their selection will take place during the inception phase of the MedProgramme together with its stakeholders (countries and executing partners). This process will be driven by the specific needs of the stakeholders and will follow a competitive process for selection ensuring an efficient use of resources.

1.3 Where are we? (Baseline Scenario)

A baseline scenario in the context of this strategy was built through a detailed scanning of existing initiatives related to KM and the objectives of the MedProgramme, and a survey addressed to project designers aimed at diagnosing needs and expectations related to KM and outreach of Child Projects.

The overview of regional (and global when relevant) initiatives on knowledge/ information management focusing on pollution reduction, biodiversity, water resources (fresh water and marine) and climate change revealed that there is a great potential for cross-fertilization and incremental innovation. At the same time, the analysis brought to light some challenges, such as fragmentation, the inability of some projects to sustain their results, insufficient resources or attention devoted to KM approaches, gaps in information sharing, among others, which point to the need to clearly address these challenges at the onset of the MedProgramme.

The responses to the web-based survey served to inform the design of the strategy and its levels, in terms of target audiences, objectives, tools and activities.

1.4 What do we want to achieve? (KM Vision and Objectives)

The MedProgramme strives to become a knowledge hub in the Mediterranean region to scale up successful practices, encourage broader adoption, promote knowledge sharing and support the common objectives of the parties to the Barcelona Convention.

In this effort, it also pioneers a new integrated KM methodology for GEF-financed programs in line with GEF programmatic approaches. The strategy puts in place a framework that will underpin and guide the MedProgramme knowledge-sharing activities and support the achievement of the programme outcome(s), reflecting the complexity of its portfolio while ensuring that its findings are effectively translated, shared and delivered to the intended audiences.

The strategy aims to maximize the MedProgramme impact by (the KM strategy objectives):

- Strengthening coordination and operational coherence among Child Projects and their partners;
- Monitoring the execution of the activities under the entire Programme to assess progress to impact;
- Leveraging and systematically sharing knowledge assets generated by the Child Projects with the intended beneficiaries and audiences;
- Strengthening the science-policy interface (SPI) and influencing decision making through data and information sharing, capacity building, and regional stakeholder engagement;
- Supporting the objectives of the Barcelona Convention and the work of the MAP system through effective stocktaking and scaling up of programme results; and
- Fostering incremental innovation within GEF programmatic approaches and enriching the knowledge base of GEF Implementing and Executing Agencies.

1.5 How to get there?

In order to achieve this vision and related objectives, three interconnected functional levels¹⁰ have been identified to articulate the KM strategy:

- 1. at the **PORTFOLIO LEVEL** to support the work of project managers and executing partners by providing project management tools and training to key regional stakeholders;
- 2. at the **GENERAL PUBLIC LEVEL** to share results, inform and influence target audiences by reaching out to and engaging with civil society, media, and representatives of non-scientific community;
- at the POLICY and DECISION-MAKING LEVEL to support the Contracting Parties of the Barcelona Convention, relevant decision makers in the region and the work of GEF Implementing and Executing Agencies by contributing to relevant regional policy processes and related GEF initiatives (particularly the IW:LEARN project).

Organizational coherence and strong synergies among MedProgramme Child Projects are considered critical to sustain effective knowledge sharing and ensure the successful achievement of the KM objectives. Careful consideration was given to the different types of knowledge that will be generated throughout the lifespan of the programme to ensure that intangible assets (tacit knowledge, intended as human and intellectual capital) as well as technical and codified information (explicit knowledge) are properly valued and managed.

1.6 Methodology

The strategy was prepared during the period June - September 2018 in the framework of the Project Preparation Grant (PPG) phase of the MedProgramme (October 2017- December 2018) in close coordination with the senior staff of the UN Environment/Mediterranean Action Plan Secretariat. It is based on the analysis of the Program Framework Document (PFD) of the MedProgramme¹¹ various background documentation (including the Report from the First Regional Consultation held on 7-8 March 2018 in Athens which confirmed the decision of the countries to prepare a KM strategy), the results of a dedicated online survey, exchanges

¹⁰ Activities and tools outlined in this strategy contribute to one or more of these operational levels.

¹¹ The Program Framework Document (PFD) was approved by the GEF Council on 26 October 2016. More info: https://www.thegef.org/project/mediterranean-sea-programme-medprogramme-enhancing-environmental-securitynairobiconvention/unep- global-programme-action-unepgpa

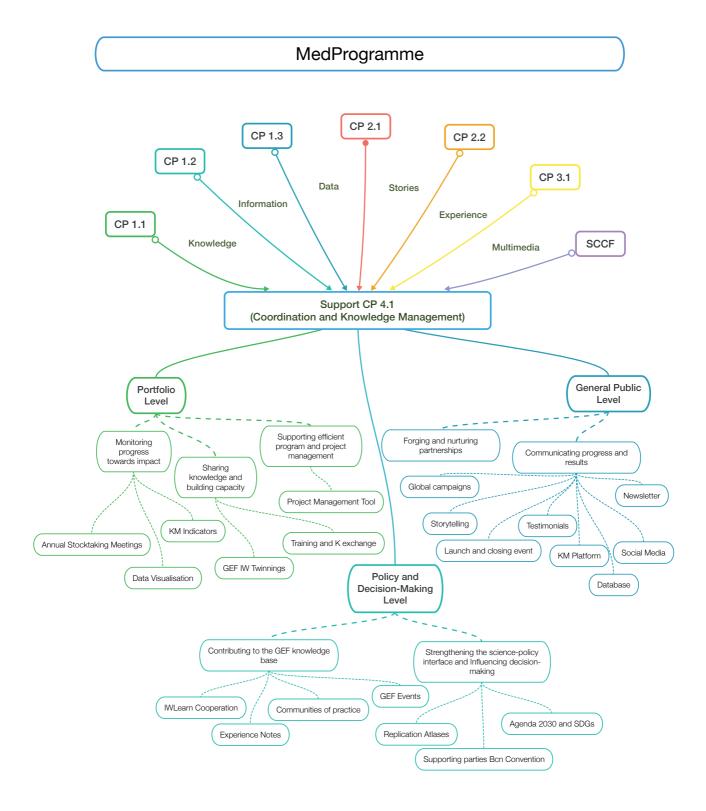
with project designers (with in-depth review of available drafts of Child Project documents), desk research, contact with relevant technical counterparts (i.e. for project management tool, visualization, etc). Further inputs were collected during the Second Regional Consultations for the MedProgramme held on 20 and 21 September 2018 at UNESCO HQ in Paris. Moreover, the design of the strategy took into account lessons learned from the predecessor project of the MedProgramme, the MedPartnership Project.

The approach illustrated in the present strategy will be operationalized during the MedProgramme inception phase in 2019.

1.7 Implementation

The overall KM strategy is built within the MedProgramme Support Child Project 4.1 and executed by the MedProgramme Coordinating Unit (MedPCU) in close coordination with all Child Projects. Outcomes and outputs of Child Project 4.1 are closely aligned with the present strategy, which, in addition to the logframe in the project document, also envisions actions to be possibly undertaken in the course of the execution of the Programme. The final detailed list of tools, activities and initiatives (and their costs) will be validated during the MedProgramme inception phase and fully agreed with the countries, executing partners and stakeholders of the Programme.

Fig. 1 Knowledge production, management and dissemination in the MedProgramme



2. Baseline scenario and projects needs

2.1 Overview of regional KM initiatives



Connection, not collection: that's the essence of knowledge management. -Tom Stewart



As the MedProgramme cuts across four different GEF Focal Areas (Biodiversity, Chemicals and Waste, International Waters and Climate Change), its results will be relevant for many different sectors and activities in the Mediterranean region. A review of the existing initiatives related to knowledge management in these domains was carried out with the purpose to: 1) avoid unnecessary duplication; 2) replicate and build on successful practices; and 3) establish potential synergies and partnerships. The research included knowledge platforms, databases, initiatives and projects on knowledge/information sharing in the Mediterranean region (or globally when relevant) focusing on pollution reduction, biodiversity, water resources (fresh and marine) and climate change.

The result is a detailed knowledge map that will be useful during the execution of the MedProgramme to: establish collaborations (for content sharing and use of respective networks to increase impact and dissemination), benefit from existing collected data and technical information, make reference to relevant policy and legal frameworks, get inspiration from effective data visualization examples and platform designs, and replicate/participate in successful awareness raising campaigns and capacity building activities (see legend in Table 1 "Relevance for the MedProgramme").

Against this baseline, the MedProgramme will generate new data and develop additional capacity of beneficiary countries to reduce pollution in marine and freshwater coastal bodies, increase resilience to climate change, improve the governance of water resources, promote the nexus approach and protect biodiversity and ecosystems.

The analysis of the knowledge map shows that there is an existing wealth of information in these domains. This poses a number of challenges as well as opportunities for effective knowledge sharing. The risk of fragmentation is high, and coordination among similar or complementary initiatives is not always optimal. Often, the results of projects are not fully sustained after their closure (possibly due to lack of funds after project execution is completed, insufficient ownership of results by key stakeholders and partners, or inadequate emphasis and instruments dedicated to KM). Another crucial issue remains the integration of different environmental datasets. Aware of these challenges, the MedProgramme is tackling KM at the very outset identifying possible solutions to overcome them. Moreover, there is ample room for cross-fertilization and learning: one must avoid the temptation to reinvent the wheel, and build instead on existing knowledge useful for incremental innovation. Lastly, the wealth of partners involved in the MedProgramme and especially the MAP system, can prevent pitfalls due to lack of ownership by leveraging and sustaining the KM efforts through their networks.

Legend Table 1



Potential Collaboration for Content Sharing and use of Respective Networks to Increas Impact and Dissemination



Reference to Key Policy and legal Frameworks



Relevant Scientific Data and Technical Information



Effective Example(s) of Dat Visualisation, Web Design and UX



GEF Focal Areas (International Waters, Biodiversivity, Chemical and Waste, Climate Change)



Succesful Awareness Raising, Outreach and Capacity Building

Table 1 Overview of selected knowledge platforms and initiatives relevant for the MedProgramme (2018)

A selection of platforms, databases, initiatives and projects on knowledge - and information - sharing in the Mediterranean region (or globally when relevant) focusing on pollution reduction, biodiversity, water resources and climate change compiled for the purpose of drawing a KM baseline scenario for the GEF/UN Environment "MedProgramme".

Initiative Name and URL	Organizations	Where - When - What		F	leleva	nce f	or Med	dProg	ramm	е	
		Geographical Area: Mediterranean Sea									
AMAre	Executing Partners: CNR, Interreg	Activity Period: 36 months (ongoing)									
https://amare.interreg-	Mediterranean	Description: The objectives of this project are 1- to develop shared methodologies and geospatial tools for multiple stressors assessment, coordinated environmental monitoring, multi-criteria analyses and				4008			BD	CW	
med.eu https://bit.ly/2BxKG9J	Donors: ERDF, IPA	stakeholders' engagements; 2- to translate these guidelines into concrete pilot actions and coordinated strategies in selected Marine Protected Areas (MPAs) to solve hot spots of conflicts affecting marine biodiversity and the services it provides.									
		Geographical Area: Europe									
AQUACROSS	Executing Partners: IOC-UNESCO	Activity Period: 2018 - ongoing			N.			I\A/	BD		
http:// dataportal.aquacross.eu	Donors: EU	Description: Aquacross Information Platform aims to provide open access to a wide range of resources related to aquatic (freshwater, marine and coastal) ecosystem and biodiversity management at the European level. The primary focus is on data used in the various project Case Studies and Work packages, and resulting maps, model outputs and tools.						IVV	טט		
		Geographical Area: Global (particular focus on Africa, Asia, Latin America, and the Caribbean)									
Aquastat		Activity Period: 1994 - ongoing									
http://www.fao.org/nr/water/ aquastat/main/index.stm	FAO	Description: AQUASTAT started with the aim to contribute to FAO's goals through the collection, analysis and dissemination of information related to water resources, water uses and agricultural water management, with an emphasis on countries in Africa, Asia, Latin America, and the Caribbean. AQUASTAT is FAO's global water information system, developed by the Land and Water Division. It is the most quoted source on global water statistics. We collect, analyze and disseminate data and information by country on water resources, water uses, agricultural water management.	/ ² \ 2-2					IW		CW	CC
Basel, Rotterdam and											
Stockholm Conventions Joint Clearing House Mechanism		Geographical Area: Global									
		Activity Period: 2001 - ongoing									
http://synergies.pops.int/ Implementation/ KnowledgeManagementand Outreach/ Clearinghousemechanism/	UN and UN Environment	Description: The joint clearing-house mechanism is a multi-stakeholder global system that facilitate the exchange of information and expertise relevant for the Basel, Rotterdam and Stockholm conventions. To achieve such an objective the Secretariat has developed, and is continuously enhancing, a global knowledge base made of <i>information</i> and <i>tools</i> , fed and used by all members of the clearing-house <i>community</i> .		自	2			IW		CW	
tabid/5382/language/en- US/Default.aspx		Geographical Area: Europe									
Biodiversity Information System for Europe (BISE)	European Commission,	Activity Period: Ongoing	رگ/		P.	0	Æ.	IVA/	BD.	CW	
https:// biodiversity.europa.eu/	European Environment Agency	Description: BISE is a single entry point for data and information on biodiversity supporting the implementation of the EU strategy and the Aichi targets in Europe.	2-2	S		400\$	#	IVV	BD	CVV	
Blue Med Virtual Knowledge Centre	Executing Partners: UfM, EU Commission, EIB,	Geographical Area: Mediterranean Area Activity Period: 2014 - ongoing	.0	-							
http://www.bluemed- initiative.eu/virtual- knowledge-centre/	IMO Donors: EU Commission	Description: The Digi-gate for Marine and Maritime Knowledge in the Mediterranean. The Virtual Knowledge Centre (VKC) was launched with the objective to provide a centralised platform for marine and maritime information and to improve synergies across different initiatives and projects in the Mediterranean region.		1			(11)	IW			
		Geographical Area: Europe									
Climate-ADAPT		Activity Period: 2012 - ongoing									
https://climate- adapt.eea.europa.eu	EU Commission, European Environment Agency	Description: Climate-ADAPT aims to support Europe in adapting to climate change. It is an initiative of the European Commission and helps users to access and share data and information on: Expected climate change in Europe; Current and future vulnerability of regions and sectors; EU, national and transnational adaptation strategies and actions; Adaptation case studies and potential adaptation options; Tools that			<u>A</u>						CC
CONSUME-LESS Consume		support adaptation planning. Geographical Area: Mediterranean Area									
Less in Mediterranean Touristic Communities		Activity Period: 2016 - 2019								0144	
https://consume- less.interreg-med.eu		Description: Consume-Less aims to develop integrated sustainable energy, water and waste management strategies and to promote sustainable tourism models in Mediterranean cities. Six pilot areas are involved: Gozo, Vélez-Málaga, Saranda, Ragusa, Realmonte and Naxos.					(III)			CW	
	Function Bostons C	Geographical Area: Global									
COPERNICUS Marine Environment Monitoring Service	Commission, ESA, EUMETSAT, ECMWF	Activity Period: 2015 - ongoing	ر ^گ ر گے۔گ		B	4008	(H)	IW	BD	CW	CC
http://marine.copernicus.eu	Donors: EU Commission	Description: The Copernicus Marine Environment Monitoring Service (CMEMS) provides regular and systematic reference information on the physical state, variability and dynamics of the ocean and marine ecosystems for the global ocean and the European regional seas.	ă-2	5		4	- T				- 3
COPERNICUS Land		Geographical Area: Global									
Monitoring Service	Executing Partners: EU Commission,	Activity Period: 2015 - ongoing									
https://land.copernicus.eu/	ESA, EUMETSAT, ECMWF	Description: Copernicus Land Monitoring Service (CLMS) provides geographical information on land cover	(4)		A	000	(III)		BD	CW	CC
scihub.copernicus.eu/ https://www.sentinel- hub.com/	Donors: EU Commission	to a broad range of users in the field of environmental terrestrial applications. This includes land use, land cover characteristics and changes, vegetation state, water cycle and earth surface energy variables.									

		Geographical Area: Europe Marine Environment								
		Activity period: 2013 - ongoing								
EMODnet http://www.emodnet.eu/	Executing Partners: EU Donors: EU Commission DG MARE	Description: The European Marine Observation and Data Network (EMODnet) consists of more than 160 organisations that together work on assembling, harmonising and making marine data, products and metadata more available to public and private users. The main purpose of EMODnet is to unlock fragmented and hidden marine data resources and to make these available to individuals and organisations (public and private), and to facilitate investment in sustainable coastal and offshore activities through improved access to quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use. EMODnet provides access to European marine data accoss seven discipline-based themes: Bathymetry; Geology; Seabed habitats; Chemistry; Biology; Physics; Human activities. EMODnet motto is 'collect data once and use it many times'.	/ <u>^</u> &_&			403		IW	BD	CW
Environment LIVE		Geographical Area: Global								
	UN Environment	Activity Period: Ongoing	r#y		A			ıw	BD	CW C
nttps:// environmentlive.unep.org	Executing Partners:	Description: Environment Live provides the UN Member States open access to information and knowledge on the environment at the global, regional and national levels. Environment Live is a dynamic on-line platform for sharing contextualized data and knowledge to keep the environment under review. Geographical Area: Mediterranean Sea	8-8		J. Company					
Euro-Mediterranean information System on know-how in the Water sector (EMWIS) http://www.semide.net/; http://www.emwis.org	UfM, EEÄ, GWP, WWC, Lebanese Minister of Energy and Water, INBO-MENBO, MED-EUM, IME, ACWUA, AQUAMADRE, ECOMENA, MEDRC, UNU-INWEH, L'Ambassade de l'Eau Donors: EU Commission, EuropeAid Co- operation Office & EC DE Environment,	Activity Period: 1999 - 2020 Description: EMWIS is an initiative of the Euro-Mediterranean Partnership. It provides a strategic tool for exchanging information and knowledge in the water sector between and within the Euro Mediterranean partnership countries. All the countries involved in the Union for the Mediterranean (UfM) are concerned: The 27 EU member states of the EU and the 16 Mediterranean Partner Countries (Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Jordan, Israel, Lebanon, Mauritania, Monaco, Montenegro, Morocco, Palestinian Authority, Syria, Tunisia, Turkey).						IW		
	France, Italy and Spain	Geographical Area: Europe								
European MSP Platform	Executing Partners: EASME on behalf of DG MARE	Activity Period: Ongoing	· E	EL.	in.					
https://www.msp- platform.eu/	Donors: EU Commission under the EMFF	Description: The European MSP Platform is an information and communication gateway designed to offer support to all EU Member States in their efforts to implement Maritime Spatial Planning (MSP) in the years to come. Funded by the EU Directorate General for Maritime Affairs and Fisheries (DG MARE), the European MSP Platform acts as the central exchange forum for the rich knowledge generated in past, current and upcoming MSP processes and projects. Geographical Area: Mediterranean Area		間				IW		
-		Activity Period: 2004 - ongoing								
European Ocean Biogeographic Information System – EurOBIS http://www.eurobis.org	EMODnet, MarBEF, LifeWatch, Flanders Marine Institute (VLIZ)	Description: EurOBIS - the European Node of the international Ocean Biogeographic Information System						IW	BD	
FATE and impact of pollutants in terrestrial and aquatic ecosystems http://fate.jrc.ec.europa.eu/rational/home.html	Executing Partners: EU Commission, JRC, Institute for Environment and Sustainability Donors: EU, JRC	Geographical Area: Europe Activity Period: 2009 - 2015 Description: FATE is the ensemble name for the pool of activities related to the assessment of fate and impacts of pollutants in terrestrial and aquatic ecosystems carried out at the Institute for Environment and Sustainability (IES) of the Joint Research Centre (IRC). Contaminants spread across different environmental media through atmospheric deposition, leaching from soil to groundwater, accumulation in rivers and lakes, and discharge into the sea. FATE addresses the fate and impacts of pollutants across a range of temporal and spatial scales depending on the policy question and making the best use of available data. The results are pollution risk and vulnerability maps, which are very useful to assess the impact of EU policies, raise public awareness and facilitate planning of management scenarios.		自	4				BD	CW
		Geographical Area: Global								
GBIF Global Biodiversity Information Facility https://www.gbif.org	EMODnet, EU, EU BON, Japan Ministry of Environment	Activity Period: 1999 - ongoing Description: GBIF—the Global Biodiversity Information Facility—is an international network and research infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth. Coordinated through its Secretariat in Copenhagen, the GBIF network of participating countries and organizations, working through participant nodes, provides dataholding institutions around the world with common standards and open-source tools that enable them to share information about where and when species have been recorded.			À		(11)		BD	
		Geographical Area: Mediterranean Sea and Black Sea								
General Fisheries Commission for the Mediterranean (GFCM)		Activity Period: 1997 - ongoing Description: The General Fisheries Commission for the Mediterranean (GFCM) is a regional fisheries	-11		in					
nttp://www.fao.org/gfcm/ data/en/	FAO	management organization (RFMO) established under the provisions of Article XIV of the FAO Constitution. The GFCM initially started its activities as a Council in 1952, when the Agreement for its establishment came into force, and became a Commission in 1997. The main objective of the GFCM is to ensure the conservation and the sustainable use, at the biological, social, economic and environmental level, of living marine resources as well as the sustainable development of aquaculture in the Mediterranean and in the Black Sea (GFCM area of application). Geographical Area: Mediterranean Area						IW	BD	
Geo-referenced information system for coastal aquifers n the Mediterranean (INWEB) http://www.inweb.gr/ndex.php? option=com_wrapper&view=wrapper&temid=220#	Executing Partners: UNESCO Chair and Network/International Network of Water- Environment, Centres for the Balkans (INWEB), Aristotle University of Thessaloniki. Donors: UNESCO	Activity Period: 2003 - 2015 Description: The UNESCO Chair/INWEB is a network of academic and non-academic institutions. Each of the ten Balkan member countries has a focal point for its own country's members. Concentrating mainly no transboundary issues that UNESCO Chair/INWEB promotes a multi-disciplinary approach to water						IW		

GODEM - Optimised		Geographical Area: Mediterranean Basin									
Management of Waste in the		Activity Period: 2010 - 2012									
Mediterranean	EU Commission	Description: The project is aimed at settling a network for the exchange of information and experiences							(cw	
https:// lra4dev.cor.europa.eu/ portal/EN/coopmonth/ Pages/GODEM.aspx	EO COMMISSION	between European local/regional authorities and institutions of the southern Mediterranean on the sustainable management of waste treatment.									
Green Growth Knowledge Platform - GGKP	Executing Partners: GGGI; OECD; World	Geographical Area: Global									
http://	Bank; UNEP.	Activity Period: 2012 - ongoing	رگي			4008	(11)		C	cw	СС
www.greengrowthknowledg e.org	Donors: MAVA, Swiss, Netherlands, Germany	Description: The GGKP is a global community of organisations and experts committed to collaboratively generating, managing and sharing green growth knowledge and data to mobilise a sustainable future.	802								
H2020/SEIS Info system		Geographical Area: South Mediterranean (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia)									
	EXECUTING PARTNERS: EEA, UN Environment MAP	Activity Period: 2015 - ongoing	,E	EA.	in			13.47		2147	
https://eni- seis.eionet.europa.eu/south	Donors: EU	Description: ENI SEIS II South Project aims to contribute to the reduction of the marine pollution in the	8.8	98	100			IW		CW	
https://www.h2020.net/	Dollors. 20	Mediterranean by developing a Shared Environmental Information System (SEIS) supporting the regular production and sharing of quality assessed environmental data, indicators and information. Geographical Area: Mediterranean Area									
ICZM Platform	Formation Books and	Activity Period: 2018 - ongoing									
	Executing Partners: PAP/RAC	Description: This interactive space is designed as a multi-disciplinary "bank" of information,	رگر		B			IW			СС
http:// www.iczmplatform.org	Donors: MTF	documentation and good practices related to ICZM in the Mediterranean (and elsewhere), as well as a place for networking and exchange. This platform provides information on the legal and policy framework, capacity building, awareness raising, data base of projects, library and the resources for	2-2	,-EJ							
	Executing Partners:	networking. Geographical Area: Mediterranean Basin									
IMAP Info Pilot System	UN Environment MAP, InfoRAC	Activity Period:	, Ex	Bà.	n			ıw			
(website under development as of 11/2018)	Donors: UN Environment MAP, EC	Description: Pilot IMAP compatible Data and Information System, connected to MAP Components' information systems and other relevant regional knowledge platforms, will provide data based on data standards and data dictionaries for ten selected IMAP Common Indicators.	88	10	102			IVV			
		Geographical Area: EU Activity Period: 2007 - ongoing									
INSPIRE Knowledge Base		Description: The INSPIRE Directive aims to create a European Union spatial data infrastructure for the									
https://inspire.ec.europa.eu	Member States of the EU	purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policy-making across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications. The Directive came into force	/ ² \ 2-2			408					
INTEGRATER COACTAL		on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021. Geographical Area: Tyrrhenian Sea									
INTEGRATED COASTAL WATER MANAGEMENT FOR		Activity Period: 2015 - ongoing			2						
https://business.esa.int/	ESA; Planetek	Description: The objective of ICWM for MED is to demonstrate the benefits of a service based on the integration of Earth Observation based products, Satellite Communication and Navigation solutions together with Terrestrial assets and crowdsourcing features, for the set-up of an improved coastal			8			IW	C	CW	
projects/icwm-for-med		surveillance and water quality monitoring service. Geographical Area: Mediterranean Basin									
Interreg Mediterranean		Activity Period: 2014 - 2020									
https://interreg-med.eu; http://forum.interreg- med.eu/en/med-community/	European Regional Development Fund, IPA fund	Description: 13 countries are working together in the transnational European Cooperation Programme for the Mediterranean area towards low carbon economy, the protection of natural and cultural resources and the strengthening of innovation The main objective of the Interreg MED Programme is to promote sustainable growth in the Mediterranean area by fostering innovative concepts and practices and a	/ ⁸ \ 8-8		À		(11)	IW	BD		CC
(Forum)		reasonable use of resources and by supporting social integration through an integrated and territorially based cooperation approach. In the period 2014-2020, Interreg MED Programme will promote cooperation between a varied typology of actors of these thirteen Mediterranean countries.									
		Geographical Area: Global Activity Period: 1961 - ongoing									
IODE	Executing Partners: UNESCO IODE	Description: The programme "International Oceanographic Data and Information Exchange" (IODE) of the		E A				IW			
https://www.iode.org	Donors: UNESCO	Plategrownmental Oceanographic Commission* (IOC) of UNESCO was established in 1961. Its purpose is to enhance marine research, exploitation and development, by facilitating the exchange of oceanographic data and information between participating Member States, and by meeting the needs of		텔				IVV			
		users for data and information products. Geographical Area: Global (GEF IW portfolio)									
IW:LEARN (Global Environment Facility's	Executing Partners:	Activity Period: 2004 - ongoing									
International Waters Learning Exchange and	UNDP; UN Environment.	Description: IW:LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange	ر ^گ ر گے۔گ			AND.		ıw			
Resource Network)	Donors: GEF	and Resource Network. The IW:LEARN project was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative		5		energy.					
www.iwlearn.net	F	solutions to common problems across the GEF International Waters portfolio. It promotes learning among project managers, country official, implementing agencies, and other partners. Geographical Area: Global (GEF W portfolio)									
	Executing Partners: UNDP, UN	, and the second									
IW:LEARN Groundawater Community of Practice	Environment (Implementing	Activity Period: 2012 - ongoing									
	International	Description: The GW CoPs aims to accelerate learning from and within the GEF IW portfolio, and promote replication of good practices in transboundary freshwater management. The CoP acts as a catalytic confidence of the property of the pro	(4)				(III)	IW	BD C	CW	
http:// groundwatercop.iwlearn.net	Hydrological Programme (Executing Agency)	coaltion among GEF W projects to promote learning that meets project-level priorities. It is designed to build on existing knowledge from inside and outside the GEF portfolio and be responsive to the learning needs of the GEF IW projects. The COP provide an opportunity to build capacity on groundwater resources management and promote the conjunctive management with surface freshwater and marine									

		Geographical Area: Mediterranean Sea								
MAMIAS - Marine		Activity Period: 2012 - ongoing								
Mediterranean Invasive Alien Species	UNEP/MAP, RAC/ SPA	Description: The Database includes among Alien species, cryptogenic ones. Tropical Atlantic species, which have expanded their geographic distribution in the Mediterranean, are noted as range expansion,	^{/ద} ్స దీ–ది						BD	
http://www.mamias.org		or vagrant. The Database includes also species that have been occasionally reported as alien but were subsequently excluded from lists, along with the reasoning of their exclusion.								
		Geographical Area: Mediterranean Sea								
MAPAMED	MarilDAN, and ODA/	Activity Period: 2012 - ongoing	-m		-					
http://www.rac-spa.org/ mapamed	MedPAN and SPA/ RAC	Description: MAPAMED (Marine Protected Areas in the Mediterranean) is a GIS database that gathers information on marine protected areas of the Mediterranean, and more generally on sites of interest to the conservation of the marine environment. It is developed and jointly administered by the MedPAN association and SPA/RAC. MAPAMED (i) facilitates the access and the sharing of data on Mediterranean MPAs, (ii) allows the analysis and the evaluation of the status and trends of the MPA network and (iii) identifies ecological and management issues at a supra-AMP scale. Geographical Area: Global						IW	BD	
		Activity Period: Ongoing								
MapX https://www.mapx.org	UN Environment, World Bank, GRID- Geneva	Description: MapX was developed by UN Environment, the World Bank and the Global Resource Information Database (GRID-Geneva) to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. One of the founding principles was to equalize information held by different stakeholders as a prerequisite to better dialogue, decision making and monitoring. MapX evolved from an initial focus on extractive resources to include a range of different resource types and themes. Of particular relevance for the MedProgramme are the data layers in MapX developed by UN Environment for MapX to support countries in meeting their reporting obligations on mercury use and emissions under the Minamata Convention, and to manage spatial information regarding PCBs and facilitate reporting for the Stockholm Convention.	/ ² \ 2-2	i				IW	BD	cw cc
Marine Biodiversity and										
Ecosystem Functioning EU Network of Excellence - MarBEF http://www.marbef.org	EU	Activity Period: 2004 - 2009 Description: A key task of the MarBEF Network is the integration of different resources related to marine biodiversity. The inventory of these resources can be found on this website. At the moment, this relational database includes information on different European marine biodiversity research sites and European marine biodiversity datasets. The European Register of Marine Species, ERMS and the European node of the Ocean Biogeographic information System, EurOBIS is also accessible through this website. The terms of use of data are formulated in the MarBEF data policy.			2			IW	BD	
MED POL Info System		Geographical Area: Mediterranean Sea								
http://www.info-rac.org/en/	UNEP/MAP	Activity Period: 2001 - ongoing	్డ్రి					IW		cw
activities/infomap		Description: MED POL Info System is an online portal that allows Contracting Parties to submit their quality assured data generated from the implementation of the national marine pollution programmes designed in accordance with LBS Protocol.								
MED-3R Euro- Mediterranean Strategic	Executing Partners:	Geographical Area: Mediterranean Basin								
Platform for a Suitable Waste Management - Recycle, Reduce, Reemploy http://www.med-3r.org/ index.php/en/about/the-	Mediterranean Sea Basin Programme ENPI CBCMED Donors: 90% European Union, 10% Partners	Activity Period: 2012 – 2015 Description: MED-3R sets up an institutional innovation of multi-level governance, implemented on the basis of strategic platform: "The Euro-Mediterranean Strategic Platform for a Suitable Waste Management" to the benefit of technical managers and experts on waste management over the Mediterranean basin.			2					CW
med-3r-project		Geographical Area: Mediterranean Sea								
MEDACES - Mediterranean Database of Cetacean	Executing Partners: RAC/SPA, ICBIBE	Activity Period: 2001 - ?								
Strandings medaces.uv.es/ home_eng.htm	Donors: Spanish Ministry of the Environment, and Rural and Marine Affairs (MMA)	Description: In November 2001, the 12th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, within the "Biological Diversity and Specially Protected Areas" section, recommended for implementing the Action Plan for the Conservation of Cetaceans in the Mediterranean Sea, to approve the offer by Spain with regard to the establishment in Valencia of a Mediterranean database on cetacean strandings (MEDACES).							BD	
	Executing Partners:	Geographical Area: Mediterranean Basin								
MedICIP http://medicip.grid.unep.ch	UNEP/MAP, Plan Bleu, GWP, PAP/RAC Donors: GEF	Description: MedICIP is an online multi countries effort to share data and information on Climate Change in the Mediterranean coastal areas. It is a "portal of portals" which gathers data, information and web links	(A)		8	ave.		IW		CC
		towards other institutions (national and regional), in support the implementation of the ICZM protocol. Geographical Area: Mediterranean Basin								
Moditorroneen Besie	Executing Partners: CEFP (Critical	Activity Period: 2012 - 2022								
Mediterranean Basin Biodiversity Hotspot	Fund); Bird's Life;	Description: During the initial investment, 108 grants were awarded to 84 different organizations in 12 countries.	رگر			. @	ATA		D.C.	CC
http://www.birdlife.org/cepf- med/hotspot	LPO; DOPPS. Donors: CEPF (GEF, World Bank, AFD, CI, EU, Japan Gov.)	This first investment phase demonstrated that civil society organizations do exist in each hotspot country, and that adequate financial support, orbined with technical support, has the potential to build strong constituencies able to tackle conservation issues at the local level. CEPF's second phase of investment will focus on protecting plants, promoting regional networking and preserving three ecosystems—coastal, freshwater and traditionally managed landscapes. CEPF is a joint initiative of I'Agence Française de Développement, Conservation International, the European Union, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank. Geographical Area: Mediterranean Basin	2-2				#		BD	
MEDITERRANEAN OBSERVATORY ON	Executing Partners:	Activity Period: Ongoing								
OBSERVATORY ON ENVIRONMENT AND SUSTAINABLE DEVELOPMENT	Plan Bleu, UNEP/ MAP	Description: Plan Bleu, acting as a Mediterranean Observatory on Environment and Sustainable Development, has developed an experience in collecting, managing and disseminating data on		h	2	000	a	IW		CC
http://obs.planbleu.org/en/	Donors: MAVA, UN Environment	Sustainable development issues in the Mediterranean Region. One of Plan Bleu's mission is to provide the Contracting Parties of Barcelona Convention with environmental and sustainable development statistics, indicators and assessments to support their action and decision making process.								

		Geographical Area: Mediterranean Basin									
Moditorrangan Water		Activity Period: (Phase 1) 2013-2016 - (Phase 2) 2016-2018									
Mediterranean Water Knowledge Platform MWKP) http://www.emwis.net/	de l'Eau (IME); Union	Description: The regional project towards a Mediterranean Water Knowledge Platform got the UfM label on 8 April 2014, at the unanimity of 43 countries members of the Union for the Mediterranean. The project has two components: the 1st one, coordinated by the International Office for Water (IOWater), aims at strengthening the National Information Systems on Water in line with the regional approach taken implemented by the Euro-Mediterranean Information System on know-how in the Water sector (EMWIS);			<u>a</u>			IW			
nitiatives/MWKP	, ,	the 2nd one, coordinated by the Institut Méditerranéen de l'Eau (IME), is based on the exploitation of data and information on water for the preparation of a Mediterranean White Paper on Water. This White Paper is part of logical showcasing best practices for integrated water resources management.									
MEDLEM (MEDiterranean Large Elasmobranchs Monitoring) PROGRAM		Geographical Area: Mediterranean Sea Activity Period: 2002 - ongoing Description: MediLem is a monitoring programme on the captures and sightings of the large cartilaginous							BD		
www.arpat.toscana.it/ medlem ————————————————————————————————————	della Toscana)	fishes occurring in the Mediterranean Sea. A tool for storing and sharing the large shark's data collected in the mediterranean countries. The database is under maintenance: it will be on line again at the end of 2017. Geographical Area: Mediterranean Area									
Madonas	Executing Partners:	Activity Period: Ongoing									
MedOpen http://www.medopen.org	PAP/RAC	Description: MedOpen aims at assisting Mediterranean countries in building capacities for coastal management. The training programme has been created to share ideas, knowledge and strategies to forward the art of designing and implementing local, national and regional place-based integrated coastal zone management (ICZM), as well as to enhance a policy dialogue and build / improve capacities on	[/] ద్ది ది–ది		Å		(11)	IW			
AL IDAN TIL	Executing Partners:	implications of climate variability and change (CV&C) considerations. The MedOpen training is completely free of charge. Geographical Area: Mediterranean Sea									
MedPAN - The network of Marine Protected Areas managers in the	UNEP RAC/SPA, WWF, IUCN	Activity Period: 2008 - angoing	r#y		B			IW	BD		cc
Mediterranean http://medpan.org	Donors: EU Commission, UNEP, WWF and others	Description: The MedPAN network's mission is to promote, through a partnership approach, the sustainability and operation of a network of Marine Protected Areas in the Mediterranean which are ecologically representative, connected and effectively managed to help reduce the current rate of marine biodiversity loss.	8-8		Julia			•••			
NBB PRTR	Executing Partners: UN Environment MAP, InfoRAC	Geographical Area: Mediterranean Basin Activity Period:	رگر		P.			IVA/		CW	
(website under development as of 11/2018)	Donors: UN Environment MAP, EC	Description: Provides information on pollution load from sectors and activities in accordance with the requirements LBS Protocol of Barcelona Convention	8-8					IW		CVV	
ORIO O		Geographical Area: Global Activity Period: 1997 - ongoing									
OBIS - Ocean Biogeographic Information System	IOC-UNESCO, IODE	Description: OBIS is a global open-access data and information clearing-house on marine biodiversity for science, conservation and sustainable development. Its aim is to build and maintain a global alliance that	(4)	P	B	000		IW	BD		
http://www.iobis.org/		collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life. Obis mission is to build and maintain a global alliance that collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life.									
	Executing Partners: Open	Geographical Area: Global									
OpenChannels	Communication for The Ocean and Partners	Activity Period: 2012 - ongoing Description: OpenChannels aims to foster a vibrant online community of ocean planners and managers	رگر		E.	~~Q	(1)	IW			
https:// www.openchannels.org/	Donors: Gordon and Betty Moore Foundation	sharing experience, knowledge, and advice with peers. In doing so, we can speed the advancement of sustainable ocean management and conservation. OpenChannels is designed to be highly focused on user needs. We want to provide access to all the information that ocean planners and managers need to do their jobs most effectively, including existing high-quality content and new information products and services.	2-2	8		QUUD.	Œ₩.				
	Executing Partners:	Geographical Area: Mediterranean Basin									
PANACeA project	Malaga University, Interreg Mediterranean, Plan	Activity Period: 36 months (ongoing)	r#y						BD		CC
https://biodiversity- protection.interreg-med.eu	Bleu Donors: ERDF, IPA	Description: Devised as a one entry point to scientific evidence supporting best practice on protected area management and environmental policymaking in the region, the Mediterranean Biodiversity Protection Platform (BPP) gathers the expert knowledge generated by the Mediterranean biodiversity protection community as main providers of content. The MedBiodiversity Knowledge platform will open in 2018.	8-8								,
Pegaso Project - People for Ecosystem-based		Geographical Area: Mediterranean Sea and Black Sea Activity Period: 2010 - 2014									
Governance in Assessing Sustainable development of Ocean and coast	Universitat Autònoma de Barcelona (UAB)	Description: The main objective of PEGASO is to build on existing capacities and develop common novel approaches to support integrated policies for the coastal, marine and maritime realms of the Mediterranean and Black Sea Basins in ways that are consistent with and relevant to the implementation						IW			
http://pegasosdi.uab.es/		of the ICZM Protocol for the Mediterranean. The PEGASO SDI is a distributed sharing infrastructure made up of GeoNodes and with three main components: a map viewer, map services and a spatial catalog. Geographical Area: Global									
Protected Planet	Executing Partners:	Activity Period: 2014-ongoing									
nttps:// www.protectedplanet.net/ <u>marine</u>		Description: Protected Planet is the most up to date and complete source of information on protected areas, updated monthly with submissions from governments, non-governmental organizations, landowners and communities. It is managed by the United Nations Environment World Conservation Monitoring Centre with support from IUCN and its World Commission on Protected Areas (WCPA). It is a publicly available online platform where users can discover terrestrial and marine protected areas, access	(4)		8	ave	曲	IW	BD		
	Executing Partners:	publicly available unline platform where uses that discover referent and makine protected areas, access related statistics and download data from the World Database on Protected Areas (WDPA). Geographical Area: Alboran sea (Gibraltar strait)									
SPACE ALBORAN	IUCN Center for Mediterranean Cooperation	Activity Period: 2007 - ongoing				2008	(III)	IW	BD		
http://www.iucn- geoportalboran.org/	Donors: IUCN, EU, MAVA, POCTAFEX	Description: The geoportal's aim is to promote governance of the natural resources of the Alboran sea. A space for governance that promotes the exchange of knowledge, participation, management and learning.					~===				

		Convention Aven Clokel									
Strategic Approach to International Chemicals		Geographical Area: Global Activity Period: 2006 - ongoing									
Management (SAICM) http://www.saicm.org/	Donors: UN Environment, ICCA, EU + 15 countries	Description: SAICM was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the 2020 goal agreed at the 2002 Johannesburg World Summit on	(4)	P	8					CW	
Home/tabid/5410/language/ en-US/Default.aspx		Sustainable Development. SAICM overall objective is the achievement of the sound management of chemicals throughout their life cycle so that by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health. Geographical Area: Mediterranean Sea									
The Mediterranean Biodiversity Platform	Executing Partners: SPA/RAC	Activity Period: 2017 - ongoing	رگر		P.	4008	Æ	IVA/	-		
http://data.medchm.net/en/	Donors: MAVA Foundation	Description: The Mediterranean Biodiversity Platform is an online tool to inventory, catalog and store data on marine and coastal biodiversity in the Mediterranean, and view them on maps. Geographical Area: Global	/ ⁸ \ 8-2	3		4000	Œ.	IVV	סט		
		Activity Period: 2014 - ongoing									
The MPA Action Agenda https://www.mpaaction.org/	WWF and partners	Description: The MPA Action Toolkit is an online platform designed for MPA managers and establishers, marine researchers and other MPA advocates. The objective of this online platform is to share knowledge on MPAs and tools that can contribute to MPA advocacy. On this toolkit you find infographics, videos, academic articles, reports and other types of material that can be used for MPA advocacy and relating activities.	(4)		4	හම්	(E)	IW	BD		
		Geographical Area: Mediterranean Basin (Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Libya, Morocco, Montenegro, Palestine, Syria, Tunisia and Turkey)									
The Strategic Partnership for the Mediterranean Sea	Executing Partners:	Activity period: 2010 - 2015									
Large Marine Ecosystem (MedPartnership) Project http:// themedpartnership.org	UNEP/MAP Donors: GEF, EU, others	Description: The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) is a collective effort of leading environmental institutions and organizations together with countries sharing the Mediterranean Sea to address the main environmental challenges that Mediterranean marine and coastal ecosystems face. The goals include: to improve environmental conditions of pollution and biodiversity hotspots and other priority areas under stress, to promote the sustainable use of marine and coastal resources through integrated approaches, to reduce pollution from land-based sources, to enhance the protection of 'critical' habitats and species, and to integrate climate considerations into national marine and coastal planning.						IW	BD		
		Geographical Area: Global									
UN Environment World Conservation Monitoring Centre https://www.unep- wcmc.org/	UNEP, WCMC	Activity Period: Ongoing Description: The UN Environment World Conservation Monitoring Centre (UNEP-WCMC) works with scientists and policy makers worldwide to place biodiversity at the heart of environment and development decision-making to enable enlightened choices for people and the planet. Our 100-strong international team are recognised leaders in their field and have unrivalled understanding of the institutional landscape surrounding biodiversity policy and ecosystem management. Based in Cambridge, UK, UNEP-WCMC is a collaboration between UN Environment and the UK charity, WCMC. By working with expert partners worldwide, we draw together, analyse and interpret information on biodiversity, and strengthen the ability	4.4	自	4	හැරි		IW	BD		
		of others to do so. Geographical Area: Global									
Water Information Network System (WINS)	UNESCO IHP	Activity Period: 2017 - ongoing Description: Launched in January 2017 by the International Hydrological Programme of UNESCO, WINS	ر ^گ ر گے۔			1008		IW			
http://ihp-wins.unesco.org/		is an open-access and participatory platform to share, access and visualize water-related information at all levels. It provides also a networking hub through online working groups, which aims to facilitate exchange among stakeholders. As of june 2018, 40 Member States have joined the platform.									
WISE - Water Information System for Europe	Executing Partners: DG-ENV, JRC, EEA, Eurostat	Geographical Area: Europe Marine Environment Activity Period: 2007 - ongoing									
https://water.europa.eu; https://water.europa.eu/ freshwater; https://water.europa.eu/ marine	Donors: EU Commission, European Environmental Agency (EEA)	Description: The Water Information System for Europe (WISE) is a partnership between the European Commission (DG Environment, Joint Research Centre and Eurostat) and The European Environment Agency. WISE is a gateway to informations on European marine issues in support of ocean governance and ecosystem based management	(4)	P	2	හම්		IW	BD	CW	
		Geographical Area: Global									
WOCAT - World Overview of Conservation Approaches and Technologies	Universitat Bern, SDC, GIZ, CIAT, ICARDA, FAO,	Activity Period: 1992 - ongoing Description: The World Overview of Conservation Approaches and Technologies (WOCAT) is a Network that was established in 1992. The WOCAT Network launched efforts to compile, document, evaluate,	్డ్రి				(11)	IW		CW	CC
https://www.wocat.net/en/ about	ISRIC, ICIMOD	share, disseminate, and apply sustainable land management (SLM) knowledge. It was far ahead of others in recognizing the vital importance of SLM and the pressing need for corresponding knowledge management. In early 2014, WOCAT's growth and ongoing improvement culminated in its being officially recognized by the UNCCD as the primary recommended database for SLM best practices. Geographical Area: Global	200								
World Resource Institute		Activity Period: 1982 - ongoing									
http://www.wri.org	WRI	Description: World Resources Institute (WRI) is a global research organization that spans more than 60 countries. Our more than 700 experts and staff turn big ideas into action at the nexus of environment, economic opportunity and human well-being. We start with data, creating user-friendly information systems, protocols and standards. We conduct independent, unbiased research to analyze relationships and design solutions, and communicate our findings in a compelling manner.			8	හම්	(E)	IW	BD		СС
Wald Water Oak Barrier	Executing Partners: UNESCO-IHP, IIWQ	Geographical Area: Global									
World Water Quality Portal http://	(International Initiative on Water Quality), EOMAP	Description: UNESCO, through its International Initiative on Water Quality (IIWQ) under IHP, has launched				408		IW		CW	
www.worldwaterquality.org	Donors: UNESCO-IHP	the first comprehensive worldwide water quality online portal for freshwater systems, lakes and rivers, retrieved from satellite-based earth observation data, to assist with global water quality assessment and capacity building.									

2.2 Analysis of preliminary survey results



Every project creates knowledge. Every project depends on knowledge. -Unknown



The eight Child Projects of the MedProgramme are expected to produce different sets of outputs and results while contributing to the overarching goal of enhancing environmental security in the region, embracing three categories of transboundary concern (components 1, 2 and 3) as illustrated in Table 2. The fourth component hosts the Support Child Project on coordination and knowledge management.

Table 2 MedProgramme Components, Child Projects and GEF Focal Areas

Medit	erranean Sea Programme (MedProgra	amme)
MedProgramme Component	Child Project	GEF Focal Areas
Reduction of Land Based Pollution in Priority Coastal Hotspots, and measuring progress to impacts.	1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts"	IW and CW
	1.2 "Mediterranean Pollution Hot Spots Investment Project"	IW
	1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"	IW
Enhancing Sustainability and Climate Resilience in the Coastal Zone.	2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"	IW
	2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS"	IW
	SCCF "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas"	CC
3. Protecting Marine Biodiversity	3.1 "Management Support and Expansion of Marine Protected Areas in Libya"	BD
Knowledge Management and Programme Coordination	4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project"	IW and CW

In order to diagnose KM-related needs and expectations of Child Projects (CP), a preliminary survey¹² was prepared and shared with project designers (July-August 2018). The designers of all projects participated in the web-based survey (27 questions), sometimes with representation of more than one person per CP. The analysis of the answers helped building the KM approach, identifying tools and levels of intervention particularly related to:

- Target audiences
- Project / Programme management
- Managing and Visualizing the data
- Information and Knowledge Management

Relevant results of the survey are presented below by cluster topics, however overall the following can be observed:

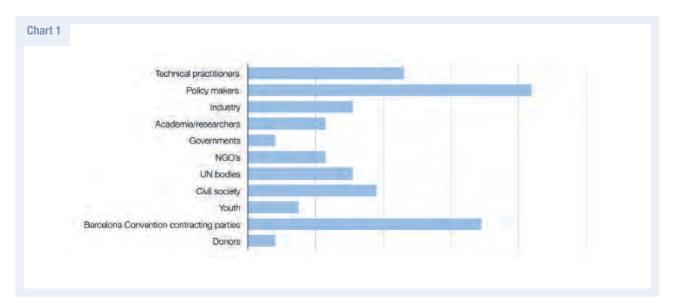
- The Child Projects of the MedProgramme will produce a rich and heterogenous amount of data and results (quantitative, qualitative, normative). A responsive system to manage the information flow is therefore needed to: capture, store and digest raw data; ensure smooth reporting and coordination; offer a digital representation of the progress through visualization tools for both spatial and non-spatial information; and use the collective information to package appropriate products and knowledge-sharing assets for the intended target audiences of the MedProgramme.
- Data sharing and data collection modalities are critical for generating and managing knowledge. Defining
 how projects will prepare and make available their data should be addressed at the beginning of the
 Inception phase of the MedProgramme, once indicators are selected for all Child Projects. A dedicated
 workshop should be organized to identify sharing standards, protocols and practices for data collection
 and reporting, including to ensure data quality, respect of privacy and compatibility with data visualization
 tools on the MedProgramme portal.
- The primary audience of the MedProgramme CPs are policy- and decision-makers in the region. However, in order to influence policy making there is a need to engage and involve a large number of diverse stakeholders to inform them about the findings and benefits arising from the MedProgramme interventions. To this end, three different functional levels (see page 32) and groups of audiences/ stakeholders have been identified to articulate the KM strategy.
- Technical practitioners are among the principal consumers of scientific reports and detailed assessments;
 therefore, each Child Project shall consider specific groups of technical practitioners in their stakeholder analysis to make sure that the KM strategy can incorporate these views at the programme level.
- The mapping of stakeholders and related engagement plan is crucial to ensure the impact of the KM strategy
 and of the MedProgramme as a whole. It is important to identify knowledge suppliers/ brokers, knowledge
 recipients/ beneficiaries and potential change agents at the project level (to be done during the inception
 phase) and then make sure that these are involved and engaged at the Programme level (see more page 25).
- During the Project Preparation Grant (PPG) phase (June-September 2018) details on activities, stakeholders, outputs and indicators of every Child Project were not available due to the staggered timeframes in preparing the individual project documents. However, through the survey (and several bilateral consultations) it was possible to collect enough insights into the planning of each CP to suggest appropriate solutions and frameworks to manage knowledge holistically across the MedProgramme portfolio.

¹² Ref. The preparation of the survey benefitted from the expert and kind advice of staff from UN Environment, Plan Bleu and PAP/RAC. The full questionnaire, which was shared through Google Forms, is annexed in .pdf

Target audiences

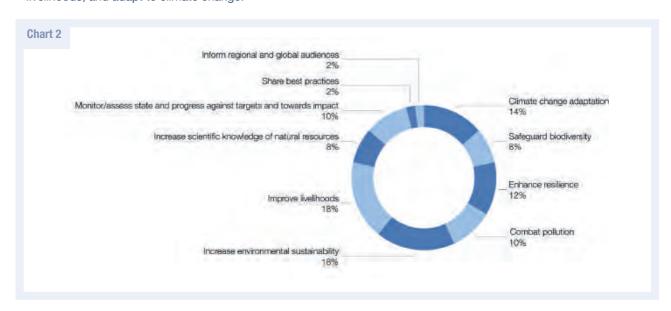
[Q2] Who will the primary target audience for your project results be?

The respondents identify as their principle target audience policy makers and the parties to the Barcelona Convention, followed by technical practitioners and civil society. Other relevant audiences are: industry, academia and other UN bodies are: industry, academia and other UN bodies.



[Q4] Why is your data important?

The data produced will have different objectives, including the priorities to enhance environmental sustainability, increase livelihoods, and adapt to climate change.



Project/Programme management

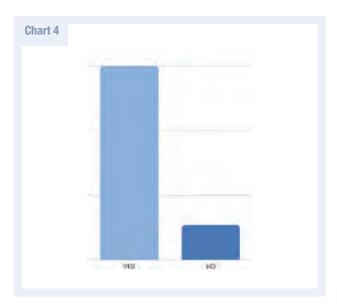
[Q3] When will your project start to produce data/results?

Three projects will start producing data right away while other projects will produce data at different times.

At the end of its liteapen After the first year Scattered in time

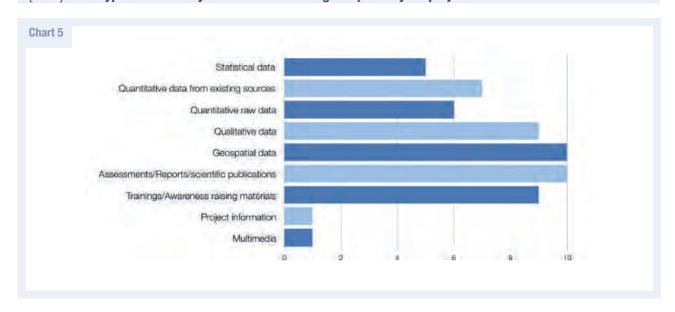
[Q7] Will you and your collaborators be willing to adopt the selected project management tool?

85% of respondents are willing to adopt a web-based project management tool with initial training provided.

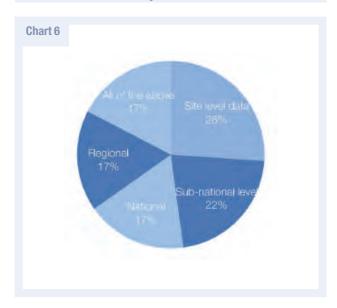


Managing and Visualizing the Data

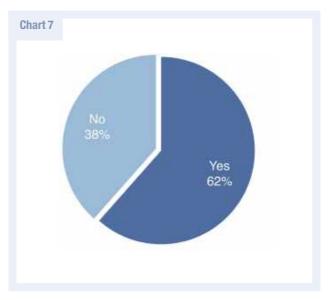
[Q10] What type of data will you collect and manage as part of your project?



[Q11] If your project works with geospatial data, what scale do you work at?

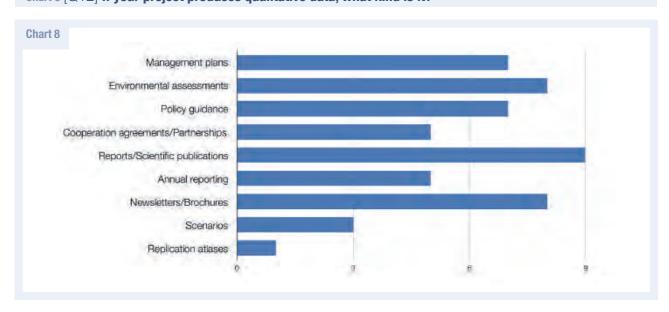


[Q13] Does your project include the collection and management of time series data?



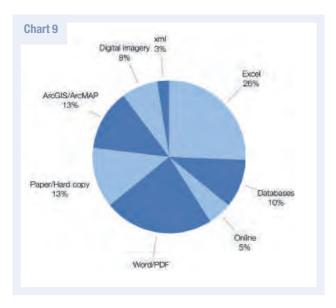
[Q10,11,13,14] Six of the CPs will produce geospatial data from site to regional levels, five will produce qualitative data (see also [16], data from surveys), four will use existing data from external sources, and three will generate new raw data, some of which will be in the form of time series with varying update frequency.

Chart 8 [Q12] If your project produces qualitative data, what kind is it?



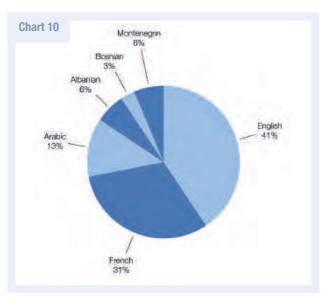
[Q16] What format will you prepare your data in?

A majority of respondents will use Excel to manage their data. Four will use MS Access or similar. Most projects will also manage (qualitative) data in Word, xml and even hard copies (e.g. from questionnaires and surveys). Five projects will manage ArcGIS or ArcMap files and three expect to generate digital images.



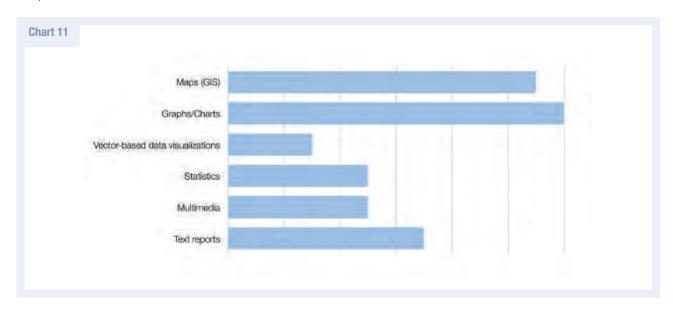
[Q5] What language(s) will your data be produced in?

Data will be produced in six different languages, with the vast majority producing data in English (41%) and/or French (31%) and Arabic.



[Q17] Within your Organization/Institution, what type of online visualization tools have you been using so far (if any)?

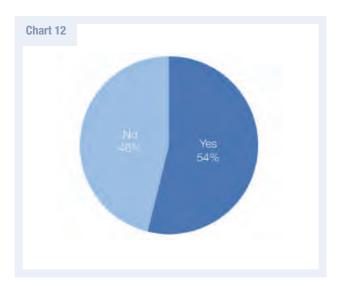
Most respondents have used charts/graphs and GIS to visualize their data in the past while a smaller number use reports, multimedia and statistics.



Information and Knowledge Management

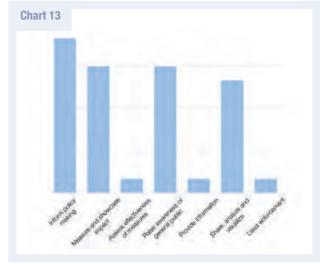
[Q8] Have you ever used a Knowledge and Information Management platform?

About half of the respondents have used information and knowledge management platforms before.



[Q23] What is your key objective for an online (geospatial) platform?

Respondents' expectations in relation to the platform are multiple and include an internal dimension related to data management and information/knowledge sharing among projects, and a public dimension related to showcasing impact, raising awareness and informing policy making in a transparent way. The platform should also help gather the elements that will be needed to tell engaging stories over the lifespan of the programme.



[Q26] What is your key objective for an online (geospatial) platform?

To this open question, respondents illustrated a variety of needs including:

- Engage partners from the beginning so they know they have a channel to promote their work (addressed at the 3 functional levels);
- Help track progress towards set goals (addressed at the portfolio level);
- Improve the internal work between executing partners and the way to communicate (addressed at the portfolio level);
- Facilitate reporting to the GEF (e.g. by timely gathering relevant information from executing partners) (addressed at the portfolio and policy levels);
- Effectively manage documents collaboratively among the co-executing partners (addressed at the portfolio level);
- Provide a roster of environmental experts (addressed at the portfolio level and policy levels);
- Provide a solid and centralized structure as well as cost-effective tools to collect, assess and share data and information (addressed at the portfolio level);
- The strategy should be designed in a way to primarily serve the governments of the contracting parties who have the executive powers to manage the environment, coast, biodiversity, natural resources (addressed at the policy level);
- The strategy should timely inform partners about expectations regarding their contributions to the communication strategy and the amount of work expected (addressed at the portfolio level); and
- The KM strategy should become a best practice for other programmatic approaches and projects.

2.3 MedProgramme Stakeholders

Stakeholder participation is an inherent part of the structure of MAP and the Barcelona Convention where all countries (represented by the MAP focal points) form the Contracting Parties to the Barcelona Convention. In addition, about 100 NGOs and Intergovernmental Organizations (IGOs), termed "partners" are participants to the meetings of the Barcelona Convention. It should also be stressed that stakeholders participated in the formulation of the TDA-MED, SAP-MED, SAP-BIO and the NAPs of the countries, on which the MedProgramme is based. In summary, the key stakeholders that CP 4.1 will strive to involve at national level include:

- Public Sector: ministries responsible for water resources; environment; spatial and development planning; transport; tourism; fisheries; industry; maritime affairs; health; fire-fighting; community development; education; culture and local government authorities.
- Private Sector: national and regional organizations representing: farmers; fisher folk; manufacturers/ industrialists; tourism and aquaculture sector; banks; insurers.
- Non-governmental Organizations (NGOs): national trusts; conservation associations; women's organizations; community-based organizations (CBOs);
- Scientific community: researchers; sociologists; environmental managers; engineers (water, civil, environmental); environmental economists; biologists; climatologists, geographers, oceanographers; teachers; curriculum specialists; media practitioners;
- General public such as the entire coastal population of the Mediterranean Basin (in particular those living in identified hotspots and sensitive areas) and the 176 million tourists visiting the Mediterranean annually.;

At a regional and global level, the stakeholders will be the various signatories to the relevant Multilateral Environmental Agreements (e.g. Barcelona Convention and its Protocols, Convention on Biological Diversity, Basel Convention, United Nations Convention to Combat Desertification, Rotterdam Convention, Stockholm Convention) and all individuals and organizations associated with the achievement of the 2030 Sustainable Development Goals.

The Terminal Evaluation of MedPartnership observed that in spite of the wide stakeholder engagement during implementation of the MedPartnership, the involvement of NGOs, private sector, and Mediterranean countries that are not eligible for GEF funding could have been greater. In the implementation of MedProgramme and its Child Projects, the Lead Implementation and Executing Agencies will foster opportunities to more closely involve NGOs and the private sector in project activities and to engage more closely with non-GEF eligible countries that share the Large Marine Ecosystem (LME) of the Mediterranean Sea. Child Project 4.1 will play an important role in this effort by broadly disseminating information on, and the progress and results of the MedProgramme, stimulating all other Child Projects to design and implement effective stakeholder participation strategies, and promoting involvement in the project's milestone events of relevant NGOs, of the private sector (in particular the tourism industry), and of all non-beneficiary Mediterranean countries.

As regards to specific stakeholders, each Child Project shall undertake its own research and analysis based on respective project objectives to identify partners, target groups and beneficiaries. This analysis is essential to understand who the different players are, their expectations and interest, their characteristics, commitment and constraints, their influence over others, etc. The MedProgramme KM Strategy will support the jump-start and continuous engagement of these groups at the programme level with targeted actions and outreach tools.

Box 2 Glossary: Stakeholders, Beneficiaries, Target groups, Partners

Stakeholders: groups that have a role and interest in the objectives and implementation of a programme or project; they include target groups, direct beneficiaries, those responsible for ensuring that the results are produced as planned, and those that are accountable for the resources that they provide to that programme or project.

Target groups: the main stakeholders of a programme or project that are expected to gain from the results of that programme or project; sectors of the population that a programme or project aims to reach in order to address their needs based on gender considerations and their socio- economic characteristics. When the target group is not sufficiently differentiated, the problem analysis tends to be superficial or too broad and does not allow the effect of the core problem within the various subgroups to be captured.

Direct beneficiaries: usually institutions and/or individuals who are the direct recipients of technical cooperation aimed at strengthening their capacity to undertake development tasks that are directed at specific target groups. In micro-level interventions, the direct beneficiaries and the target groups are the same.

Ultimate (or indirect) Beneficiaries: This is the target group that is expected to be better off as result of the project. The project may provide services directly to this group or more commonly target this group through the strengthening of institutions and organizations (i.e., the direct recipients), which support, increase awareness, or advocate on behalf of the ultimate beneficiaries. The distinction between direct recipients and ultimate beneficiaries is particularly important for donor-funded technical cooperation projects, where donors are primarily concerned with the impact of the project on the latter group. As a result, the project proposal should spell out the intended results of the project beyond just the direct recipients.

Partners: The individuals and/or organizations that collaborate to achieve mutually agreed upon objectives. Note: The concept of partnership connotes shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations. Partners may include governments, civil society, non-governmental organizations, universities, professional and business associations, multi- lateral organizations, private companies, etc.

Source: adapted from UNDP and ILO

2.4 Contributing to the Programme-wide KM

Each Child Project is expected to participate in the common knowledge management (KM) strategy to maximize efficien , ensure good governance of the programme and achieve greater impact at the diffe ent functional levels identified (portfolio level, general public level and po icy- making level).

While specific needs related to the diverse outputs of the individual projects will be analyzed on a case-by-case basis, all CPs are evenly contributing to the various activities illustrated in this document. A standard text included in each Child Project document reflects this approach and is aimed at harmonizing individual contributions. The synergetic approach is also reflected in the allocation of evenly distributed budget under each CP that will be used to support KM activities, production of knowledge and data. CP 4.1 will cover for example the costs of developing the KM platform (including the project management tool), organizing activities and events and producing communications material. Each CP will use the dedicated allocation of funds to, for instance, feed the platform with processed data, produce specific information for the preparation of advocacy material, etc.

3. Why a KM strategy?



Much of knowledge management is common sense, but not common practice. -Unknown



3.1 KM in the literature

Since the early 1990s there has been growing attention to the process of managing knowledge within organizations and businesses, mostly with the objective of improving performance and capitalizing on lessons learned. Pioneering professors Ikujiro Nonaka and Hirotaka Takeuchi, were among the first to investigate the benefits of Knowledge Management in organizations and popularize the concepts of "tacit" and "explicit" knowledge. In their 1991 groundbreaking article "The Knowledge-Creating Company", they affirm that: "In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge". Through the work of dedicated scholars, knowledge management (KM) has gained a consolidated reputation leading to its establishment as a recognized discipline. KM is now viewed as an organization's most valuable and strategic asset deserving to be treated accordingly.

There are many definitions of KM (see Box. 2) but it can be commonly described as the "systematic process to identify, capture, structure, value, leverage, and share an organization's intellectual assets to enhance its performance and competitiveness through a multidisciplinary approach".

Box 3 Definitions

Knowledge Management (KM): the systematic processes, or range of practices, used by organizations to identify, capture, store, create, update, represent, and distribute knowledge for use, awareness and learning across and beyond the organization.

Knowledge Management Systems (KMS): any kind of IT system that stores and retrieves knowledge, improves collaboration, locates knowledge sources, mines repositories for hidden knowledge, captures and uses knowledge, or enhances the KM process.

Knowledge Products and Services: these refer to outputs such as databases, publications, visual material, maps (knowledge products) and outcomes such as awareness raising, information sharing, and capacity building (knowledge services).

Knowledge Assets: are the accumulated intellectual resources of an organization in the form of information, ideas, learning, understanding, memory, insights, cognitive and technical skills, and capabilities.

Source: Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.

Knowledge Sharing: A subset of knowledge management encompassing the exchange of knowledge (information, skills, experiences, or expertise) within and across organizations. Although it can be one- directional, knowledge sharing in most cases is a two-way or multilateral exchange in which the parties learn from each other. Knowledge sharing is more than mere communication because much knowledge in organizations is hard to articulate. In development work, some knowledge sharing has a regional aspect. For example, South-South knowledge sharing refers to exchanges among partners and peers across developing countries.

Source: Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO

KM is based on two critical activities:

- 1. the capture and documentation of explicit (technical and codified information) and tacit knowledge (intangible assets intended as human and intellectual capital);
- 2. their dissemination amongst the intended audiences and stakeholders.

There are two key challenges: knowledge is difficult to assemble, and it is difficult to encourage its use. Many managers see it as a time-consuming distraction from their core role. However, proper knowledge management can reduce risks and increase efficiency through the re-use of proven approaches and avoidance of known pitfalls. It can also produce a virtuous circle as individuals and teams see their contributions recognised and re-used, thus encouraging further participation in the process. Accurate knowledge management is a powerful enabler of organizational learning and an indispensable ally for strengthening the science-policy interface. Writing a report or producing scientific data is only a part of the broader effort to promote environmental sustainability, because without effective sharing of information (in terms of language, tools, channels, etc) and dialogue among all stakeholders involved, the impact of the knowledge produced remains very limited. Considerable progress in raising awareness and improving scientific dissemination has been achieved in recent decades, but the urgency posed by challenges worldwide calls for accelerated and renewed efforts to raise the awareness of policy makers and the public at large about the measures needed to achieve sustainable development and the protection of natural resources.

3.2 KM under GEF programmatic approaches

The policy recommendations emanating from the GEF-7 replenishment¹³ clearly refer to knowledge as a "critical asset of the GEF Partnership" and commend "the steps taken to build the GEF's knowledge management systems and practices in GEF-6, as well as the increasing attention to learning and knowledge exchange in GEF projects and programs, notably the integrated approach pilot programs, and in outreach to recipient countries".

The call for more investments in knowledge management systems and practices also stems from recent GEF OPS (Overall Performance Studies) which have found that "the relevance of knowledge management to the GEF mandate has been increasingly recognized, and efforts to improve knowledge management in the partnership have been made on several fronts". The GEF2020 Strategy emphasizes "strategically generating knowledge" as a priority. In 2014, the policy recommendations in the GEF-6 Replenishment Document similarly emphasized "the importance of developing a knowledge management (KM) system that aims to improve the GEF partnership's ability to learn by doing and thereby enhance its impact over time". 14

At the same time, the GEF-7 Programming Directions commend programmatic approaches (see Box 3) to tackle environmental degradation, making the case for better performance and higher impact of projects within a program. It is noted that "Child projects generally performed better than stand-alone projects on all rating dimensions, especially on execution quality, sustainability and M&E design. Child projects have also improved in design and are now better linked to the overall program in terms of objectives, result based

¹³ Ref. GEF-7 Replenishment, Policy Recommendations, Fourth Meeting for the Seventh Replenishment of the GEF Trust Fund, GEF/R.7/18, p.9,www.thegef.org/council-meeting-documents/gef-7-policy-recommendations

¹⁴ Ref. Global Environment Facility Independent Evaluation Office (GEF IEO), OPS6 Final Report: The GEF in the Changing Environmental Finance Landscape. Washington, DC: GEF IEO, 2018, p. 147 www.thegef.org/sites/default/files/council-meeting-documents/GEF.A6.07_OPS6_0.pdf

management and M&E."¹⁵ In addition, OPS6 reports that "multi-focal area projects are better at achieving global environmental and socio- economic outcomes at completion compared to single-focal area projects"¹⁶. A recent IEO brief¹⁷ further noted that country stakeholders cite "improved knowledge sharing and synergies with other GEF projects among the incentives for joining a program.

Box 4 GEF Programmatic approaches

Programmatic approaches, formalized in 2008¹⁸, are particularly relevant to the Global Environment Facility (GEF), given the long-term nature of the environmental problems the GEF addresses. The GEF-7 Replenishment Programming Directions¹⁹ reaffirms this approach noting that "more complex programs and sets of child projects will tend to offer more entries for development links due to multi-sectoral approach, multi-stakeholder engagements and platforms, and potential for delivering socio-economic co-benefits, along with enhancing the sustainability of the associated investments."

Managing knowledge holistically within programs is a key undertaking, posing additional challenges due to the extra complexity and number of partners and stakeholders involved. The STAP²⁰ notes that "as the GEF moves further towards integrated approaches, multi-focal projects and impact programs, it is increasingly important to facilitate acquisition of formal and tacit knowledge, organize knowledge assets from complex situations and make them available to inform future investments. The Integrated Approach Pilot (IAP) programs and Impact Programs impose greater needs for connections between 'child' projects and program objectives. KM is the obvious means to tie these connections together, to collect evidence-based learning, and to achieve sustained impact that deliver benefits far into the futu e."²¹

This emphasis from the GEF on both integrated knowledge management systems and holistic multi-focal area programmes, clearly sets the ground for a purposeful, concrete and action- orientated KM strategy for the MedProgramme. During its execution, the MedPCU will make sure that actions are closely aligned with GEF KM-related guidelines²².

¹⁵ Ref. GEF-7 Replenishment, Programming Directions, Fourth Meeting for the Seventh Replenishment of the GEF Trust Fund, GEF/R.7/19, p.6, https://www.thegef.org/council-meeting-documents/gef-7-programming-directions

¹⁶ Ibic

¹⁷ Evaluation of Programmatic Approaches in the GEF, IEO Brief, The Independent Evaluation Office (IEO) of the GEF, 2017. Full brief at: http://www.gefieo.org/sites/default/files/ieo/signposts/files/programmatic-approaches-2016- brief.pdf

¹⁸ "Programs have been part of the GEF since its establishment. [...] In 2008, the Council endorsed the objectives and principles for programmatic approaches. For the first time, detailed procedures for designing pro- grams were approved, including the introduction of the program framework document (PFD). This resulted in an increase in the submission of programs to the Council and a change in their nature from phased to clustered ones. Importantly, a stimulus to program ownership was introduced by defining programs as "a more strategic level interaction with the GEF" for countries. [...] Until GEF-5, Council discussions about programs centered more on administrative than technical matters. This changed in 2014, when the Council approved a re- vised modality based on program scope: (1) thematic—the program addresses an emerging issue (e.g., a driver of environmental degradation), and (2) geographic—the program focuses on a particular geography. In GEF-6, the GEF introduced the IAPs, which focus on drivers of environmental degradation through supporting broad stakeholder coalitions and scalable activities." IEO BRIEF, Evaluation of Programmatic Approaches in the GEF, January 2018

¹⁹ The full document of the GEF-7 Replenishment Programming Directions is available at: https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-7%20Programming%20Directions%20- %20GEF_R.7_19.pdf

²⁰ STAP stands for the Scientific and Technical Advisory Panel of the Global Environment Facility. More info: http://www.stapgef.org

²¹ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 3

²² At the time of the PPG phase (June-September 2018) final GEF guidelines on KM were not yet available. However, due consideration of provisions contained in the GEF Knowledge Management Approach Paper (2015, https://www.thegef.org/sites/default/files/council-meeting- documents/EN_GEF.C.48.07.Rev_.01_KM_Approach_Paper.pdf) and other relevant documents was taken into account when preparing this strategy.

4. Getting there: a modular architecture



Knowledge is the new capital, but it's worthless unless it's accessible, communicated, and enhanced.

-Hamilton Beazley



In order to achieve the objectives of the KM strategy, three interconnected functional levels have been identified to structure actions, activities and tools:

- 1. at the PORTFOLIO LEVEL;
- 2. at the GENERAL PUBLIC LEVEL;
- 3. at the POLICY and DECISION-MAKING LEVEL

Each level is articulated along different objectives. Activities and tools contribute to one or more KM levels and to the two Components of Child Project 4.1 (see Table 3, page 32). They are presented associated with objectives (such as "Monitoring progress towards impact"), but in most cases they are meant to respond to the needs of more than one KM level.

Table 3 Contribution of activities and tools to KM levels and CP 4.1 Components

Activity/Tools	Portfolio Level	General Public Level	Policy Level	CP 4.1 Component 1 Knowledge Sharing and Dissemination	CP 4.1 Component 2 Coordination and Synergies
Project/Program Management Tool	X				Х
Database and Visualization tools	X	X	X	X	х
Public portal		X	X	X	
Annual Stocktaking Meetings	X	x	X	X	x
Replication Atlases		x	X	X	x
Trainings for portfolio	X				x
MedProgramme identity	Х	X		X	
Med Bulletin/Newsletter	X	x	X	X	x
Storytelling (movies, graphic novels, podcasts, infographics,)		X	X	X	
Social media		X	X	X	
Technical reports and scientific publications, IW:LEARN Experience Notes		X	X	X	
MedProgramme Launching event and Final Conference	X	X	X	X	х
IW:LEARN IWC and twinnings, GEF events	X		X	X	X
Global campaigns and processes		X	X	X	
Engagement with testimonials		X		X	
Partnerships	Х	X	Х	Х	

4.1 Portfolio Level

The work of project managers and executing partners is supported through provision of project management tools, monitoring frameworks, trainings and knowledge exchanges. A series of IT- based solutions and knowledge-mining and -sharing techniques are used to capture codified information as well as intangible assets.

4.1.1 Supporting efficient project management

4.1.1.1 Project Management Tool

A multilingual online project management tool²³ (integrated in the KM platform) can respond to the need of supporting efficien project (and programme) management by facilitating communication and information exchange among key actors of the Programme; promote knowledge sharing and peer-to-peer learning; facilitate tracking and monitoring of progress; and meet reporting requirements. A review of options currently available on the market (such as Asana, Freedcamp, Wrike, Slack, Microsoft Project, Basecamp, among others) has been carried out in the preparatory phase of the MedProgramme with a view to inform the selection of the most suitable tool to serve the needs of the portfolio. The final selection and adoption of the tool will occur during the inception phase of CP 4.1.

This decision-support system employs effective data-mining techniques and can be customized to suit the programme's needs, and project managers (and designated project collaborators) will receive specific training on its use and adoption to ensure portfolio-wide consonance.

Key features for such a tool include (but are not limited to): automated reporting, shared calendars, live editing/collaboration on document development, workflow and task monitoring, Gantt-Chart, time tracking, file management and cloud repository, encrypted security, back-ups, integration with email and other products, mobile apps, and role-based access control and discussion boards.

The majority of respondents to the online survey on projects needs welcomed the idea of utilizing a PMT (and benefitting from ad hoc training). Previous experience from MedPartnership showed little use of a similar tool, however since then these online tools have greatly improved their features and levels of customization, and have been adopted widely to manage complex, multi- partner and multi-lingual projects.

4.1.2 Sharing knowledge and building capacity

One of the objectives of the MedProgramme is to improve the capacity of key regional stakeholders and build socio-economic resilience of impacted communities. To this end, a series of knowledge exchanges will take place at diffe ent levels taking inspiration and practical lessons learned from the GEF Partnership (reflecting the wealth of experience and examples from projects and programs around the world) and other relevant Organizations involved. A milestone activity in this sense is represented by the series of MedProgramme Annual Stocktaking Meetings (see next section).

²³ Project management tools (PMT) are aids to assist an individual or team to effectively organize work and manage projects and tasks. PMTs can either be desktop software, web-based and as a mobile app. Most of the tools are web-based only with a few providing also desktop and mobile based versions, regardless of the kind of version all the work is updated instantly across all devices and accounts.

4.1.2.1 Knowledge Exchanges

At the portfolio level, the MedPCU will capacitate Child Project teams with knowledge and training that can help them to deliver better project results and achieve greater impact. The identification of topics and modalities of exchange (face-to-face, virtual meetings, Communities of Practice, Expert visits, Study Tours, manuals, among others²⁴) will be defined at the beginning of the Programme implementation. Preliminary topics could include:

- 1. Gender mainstreaming and stakeholders' engagement;
- 2. Scientific communication: bridging the gap between scientists/technical practitioners and media specialists;
- 3. Lessons learned from the MedPartnership and the ClimVar and ICZM projects.

It is expected that these knowledge exchanges will further empower project stakeholders, enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas.

Additionally, Child Projects will participate in learning exchanges by twinning with other relevant GEF IW projects as facilitated by the GEF IW:LEARN Project (see more at page 44).

Moreover, the MedPCU will support specific capacity building activities foreseen by each Child Project by taking stock and amplifying results through the programme-wide outreach.

4.1.3 Monitoring progress towards impact

4.1.3.1 Annual Stocktaking Meetings (ASM)

The Annual Stocktaking Meetings (ASM)²⁵ are one of the milestone activities of the MedProgramme. They are major regional events aiming to establish synergistic interactions among Child Projects and with other relevant initiatives and stakeholders, including with all other Mediterranean countries not participating in the MedProgramme.

ASMs hold a two-fold objective: 1) provide a forum for peer-to-peer learning among the Programme portfolio, and 2) catalyze regional and global attention on the progress made towards impact in the entire Mediterranean region.

The ASMs will be an occasion for face-to-face knowledge exchanges, south-south and north- south learning, and promotion of the broader adoption of MedProgramme approaches and solutions. Project managers, stakeholders and beneficiaries will have the opportunity to learn from each other, tap into respective tacit knowledge, and at the same time benefit from experiences and expertise generated by GEF and non-GEF projects and other relevant experts in diffe ent disciplines with diverse backgrounds. Moreover, Child Projects will have the chance to showcase their implementation advancement, discuss problems encountered, and engage with a broad audience of peers and stakeholders. The participation of regional and global media

²⁴ Useful guidance can be found in the following publications: ""The Art of Knowledge Exchange. A Results-Focused Planning Guide for the GEF Partnership" 2015 (https://www.thegef.org/sites/default/files/publications/GEF_WB_AoKE_English.pdf); "Becoming a Knowledge-Sharing Organization" 2016 (http://documents.worldbank.org/curated/en/306761478498267644/pdf/109809-PUB- Box396311B-PUBLIC-DOCDATE-11-2-16.pdf); and

²⁵ The importance of, and need for stocktaking meetings emerged during the execution of the Strategic Partnership for the Danube and Black Sea Basin, the first GEF experiment in multi-project programs.

will raise public awareness across the Mediterranean countries and beyond. These knowledge exchanges will further enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas. The meetings will involve: all Child Projects and Governments of the participating countries, the MedProgramme's implementing and executing agencies, the GEF Secretariat and Independent Offic of Evaluation (IOE), Convention Secretariats, the UN Environment Global Program of Action (GPA), as well as major regional and global NGOs, representatives of those Mediterranean countries not participating in the MedProgramme; bilateral and multi-lateral donors, IFIs, the UfM, other regional intergovernmental organizations (OSS, etc.), and major private sector coastal area actors, water users, tourism associations and the shipping industry. Representatives of faith- based leaders, women's organizations, youth organizations, fashion/art/sport testimonials, media specialists, among other relevant groups will also be invited to participate in these events, following a dedicated stakeholders' analysis.

All project partners are expected to attend, and meaningfully participate in, the ASMs. They will be organized by the MedPCU in cooperation with all CPs and country representatives and will take place on a rotation basis in diffe ent project countries.

The ASM design, objectives and architecture will be defined during the first year of MedProgramme operation and approved at the CP 4.1 Steering Committee level. The first ASM will be held during the second year of MedProgramme operation.

4.1.3.2 Data visualization

Data visualization tools effectively support monitoring and reporting through easy visualization of selected data thus taking stock of progress. The table below illustrates possible types of visualization for geospatial and other types of data²⁶.

Table 5 Visualization examples for geospatial data and other types of data

GEOSPATIAL DATA		
Type of visualization	Type of data example	Visual example
Pin, symbol (with or without color or icon coding)	Coastal contamination hotspots, industrial wastewater treatment plants, etc.	A ACT OF THE PARTY
Polygon (with or without color coding, with or without color following a scale)	Number of water system clients connected to modern wastewater facilities, Coastal contamination hotspots, Concentration of mercury in coastal waters, Landscape and seascape under improved management, etc.	
Proportional symbol (color and/or size follow a scale)	Amounts of POPs disposed of /recycled on-site, Amounts of Mercury/ disposed of recycled on-site, Volume of industrial wastewater receiving secondary treatment, Volume of treated industrial wastewater reused, etc.	

GEOSPATIAL DATA		
Type of visualization	Type of data example	Visual example
Heatmap	Concentration of POPs in coastal waters, etc.	0 -
Choropleth maps	Countries implementing comprehensive Integrated Coastal Zone Management, Countries implementing sustainable consumption and production (SCP) approaches, Countries having completed inventories of submarine groundwater discharges, etc.	

OTHER TYPES OF DATA			
Type of visualization	Type of data example	Visual example	
Animated gauge	Real-time progress towards target of 3,250 tonnes reduction in POPs contamination, progress towards target of 50 tonnes reduction in mercury contamination, etc.		
Pie chart	Training distribution by type of training and by gender, etc.	0	

Note: For each geospatial visualization above, more information could be displayed in overlays (which appear when hovering the mouse).

4.1.3.3 Measuring Knowledge Management impact



Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted. –Albert Einstein



Unlike other activities that can be justified in terms of explicit and measurable monetary savings, the added value of knowledge management is more difficult to quantify. Knowledge management benefits are both far reaching and hard to measure as they relate primarily to preventing the waste of money, time and human resources. It is difficult to quantify the expense – in terms of time and money – of finding the right information or reproducing knowledge that already exists, or of using obsolete rather than upto-date information. The prevention of errors and the savings that are often achieved through better use and reuse of existing knowledge are practically invisible in accounting terms²⁷.

Nevertheless, it is important to assess the performance of KM efforts and measure the impact of the KM strategy. Measurement, benchmarking and incentives are essential to accelerate the learning process and to drive cultural change. When distilling recommendations to improve the systematic treatment of the need for KM, the STAP recommends that "knowledge management progress indicators should be included in the GEF Results-Based Management system" 28.

A menu of indicators (both quantitative and qualitative) will be considered by the MedPCU in order to monitor knowledge-related activities (Table 5). Once indicators are discussed and approved during the inception phase of the MedProgramme, related targets can be developed to measure the achievement of the objectives.

Table 6 Possible KM Indicators

What to measure	Indicators	Means of verification
How often are internal users I) accessing, II) contributing to, or III) using the knowledge assets and sharing processes at their disposal?	 Number of connections per day/week/month Number of knowledge assets downloaded Number of discussions or messages shared, etc. 	Usage data will be provided by the MedProgramme portal analytics
What is the level of internal user satisfaction with the MedProgramme project management tools and how is it impacting their work?	 User friendliness of the tool from 1 to 5 (e.g. interface, design, navigation, etc.) Technical quality of the tool from 1 to 5 (features, speed, etc.) Overall level of satisfaction from 1 to 5 Has facilitated collaboration within your CP from 1 to 5 Has facilitated collaboration with other CPs from 1 to 5 Has helped you save time by giving your access to resources from 1 to 5 	This can be measured through internal satisfaction surveys that will also provide a venue for users to suggest improvements, (virtual) meetings, etc. Stakeholders should be engaged in a structured manner, for example through interviews, focus groups, or peer learning activities.

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²⁷ Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO

²⁸ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 5

What to measure	Indicators	Means of verification
How often are public users IV) accessing the MedProgramme portal, and V) accessing the knowledge assets?	 Number of visits, Average time spent Number of downloads Pages visited Number of recipients opening the newsletter Ease of finding knowledge esources on the portal from 1 to 5, etc. 	Usage data will be provided by the MedProgramme portal analytics. A feedback form can also be available at all time on the portal.
Is MedProgramme producing quality knowledge assets?	 Level of satisfaction of stakeholders with knowledge asset Are stakeholders using knowledge assets in their work 	This can be measured through a stakeholder survey.
Is MedProgramme contributing to the GEF knowledge base?	Knowledge assets shared on other GEF platforms (IW:LEARN and others)	This will be monitored by the MedPCU.
Is MedProgramme building the capacity of key regional stakeholders?	 Key regional stakeholders have been identifie Number of knowledge exchange activities implemented Number of participants at the Annual Stocktaking meetings 	This will be monitored by the MedPCU.
Is MedProgramme participating / contributing to global and regional campaigns, events and processes?	 Number of regional and global events with MedProgramme participation (as presenter) Number of #MedProgramme mentions on SDG social media channels 	This will be monitored by the MedPCU.
Is MedProgramme getting the attention of the media?	 Number of media hits in target languages / countries Number of media hits in first tier media outlet Number of Op-eds placed, etc. 	This can be monitored by a media agency for a fee or with free tools such as Google Alerts.
Are Parties to the Barcelona, Stockholm, Minamata, and Basel Conventions VI) aware of the MedProgramme outputs / outcomes? VII) using the MedProgrammes outputs?	Number of briefing o ganized with Parties to the Barcelona Convention Number of countries attending the briefin Number of countries using MedProgramme outputs	This will be monitored by the MedPCU and country representatives can be surveyed through face-to-face interviews, etc.

4.2 General Public Level

Civil society, media, and representatives of non-scientific community are informed about MedProgramme's results and engaged in knowledge sharing activities both as brokers and beneficiaries

4.2.1 Communicating progress and results

The KM strategy foresees a large component on communications and outreach aimed at ensuring that results are properly shared with the intended audiences to maximize, replicate and scale up best practices and lessons learned.

A number of traditional communications activities (such as newsletters, brochures, etc.) will be blended with innovative and creative approaches (graphic novels, documentaries, podcasts, etc). to ensure visibility of the Programme.

4.2.1.1 Knowledge Management Platform

The engine of the KM strategy is enshrined in a powerful web-based knowledge hub comprised of a

data and information management system (with both public and restricted access) and a combination of visualization tools to serve the portfolio's needs.

The platform will serve as central repository of all the data generated by the Child Projects and will be designed with a view to the following strategic knowledge management objectives:

- Facilitate information sharing and promotion of the Programme achievements among the partners and the regional stakeholders.
- Reflect the indicators of all Child Projects in the establishment of the relevant tools and frameworks, and seek coherence with efforts underway in the GEF's Chemicals and Waste Focal Area to create a platform to assist countries in meeting the reporting requirements of the Stockholm and Basel Conventions.
- · Support policy development through its data collection and management tools.
- Strengthen the science-policy interface, incorporating relevant data already generated by the countries, with the clear understanding that no data would be disseminated without the permission of its owner.
- In the long term, become a tool of the Contracting Parties of the Barcelona Convention.
- Assist countries in meeting their IMAP reporting requirements.
- Ensure that the highly valuable legacy of the MedPartnership, which produced a substantial volume of knowledge and information as well as a number of tools and guidelines, lessons, and experiences, is carefully preserved and easily accessible, including translations of key documents.

Such an integrated platform should host: 1) a project management tool; 2) a public/outward-facing portal, including sub-webpages for each CP; 3) visualization tool(s) to display a digitalized representation of data through GIS and other suitable means; and 4) a database for raw/primary data.

- 1. The project management tool was described previously (page 33)
- 2. The outward-facing MedProgramme portal will be populated with key information showcasing progress towards impact and the contribution of the MedProgramme to global and regional environmental goals. The portal will serve as a gateway for information related to international waters, coastal zones, biodiversity and climate resilience in the Mediterranean sea basin, bringing together information from GEF and non-GEF projects (for example results from the MedPartnership project will be made available and possibly re-packaged in new material) for broad dissemination and cross-fertilization (several platforms identified in the Baseline can be cross-referenced from the MedProgramme platform to reach out to vaster audience and stakeholders). It will closely dialogue with the GEF's new portal (corporate database for projects, reports, and documentation) and the IW:LEARN website. The MedProgramme portal will feature a highly user-friendly interface including effective search functions, filters (such as drop-down menus) and analytical capabilities. Each Child Project will have dedicated sub-pages about their specific activities. CPs are expected to provide regular information (in diffe ent multimedia formats) to generate content for their respective project sub-pages and the overall programme portal. The MedPCU will be responsible for curating the information provided and packaging them for the intended audiences.

- 3. Visualization tools²⁹ will be used to display spatial and non-spatial data (be they quantitative or qualitative) generated by the projects. Data need to be stored and mined in a way that makes them readily available not only to track progress but also to support decision making by the diffe ent stakeholders. GIS (geographic information system³⁰) will be largely used as well as textual information, photos, story maps, pie charts, graph charts, infographics, map dashboards, trend line charts, among others (see examples in Table 5). Users can build a query based on specific criteria such as geographic area, data layer or specific indicators. Alternatively, users can simply browse for information using the icons provided. There are a number of visualization software tools available both as open source and commercial options. A number of products (with license or open access) could be suitable for integration in the MedProgramme knowledge platform, such as Esri ArcMap and ArcGis, Geonode, QGIS, MapX³¹ and Google Earth Outreach³². The final selection will be made during the inception phase.
- 4. Raw/primary data will be stored in a database with flexible restricted/public access. A shared data model/protocol should be agreed at the beginning of the Programme to ensure that projects will compile relevant data with a standardized approach and enable a harmonized data entry system (the INSPIRE directive³³ could be taken as reference to harmonize the process). Issues related to open data, ownership, quality and review of data will be addressed in this exercise; a mapping of voluntary standards can help to evaluate feasible options. Contributors of data are all stakeholders of the MedProgramme, including the Executing Partners. Child Projects are responsible for producing their own data.

4.2.1.2 MedProgramme identity

In terms of visibility, the MedProgramme will be presented in a holistic and coherent way through the development of clear vision statement and positioning, visual identity, logo design, etc. showing consistency and integration across the portfolio. At the same time, each Child Project will be granted individual identities within the overall MedProgramme-branding in order to promote specific activities and benefit from ad hoc services. This will entail the design of consistent logos for each CP, creation of sub-websites within the Programme platform, organization of tailor-made trainings, preparation of specific publications, social media services, among others.

The MedPCU will develop a proposal³⁴ in close consultation with project teams and, once adopted at the Steering Committee level, Child Projects are expected to use it consistently.

²⁹ Data visualization is the presentation of data in a pictorial or graphical format, and a data visualization tool is the software that generates this presentation. Data visualization provides users with intuitive means to interactively explore and analyse data, enabling them to effectively identify interesting patterns, infer correlations and causalities, and supports sense-making activities.

³⁰ The information about location associated with observation and statistical analysis is called geographic information.

³¹ MapX was developed by UN Environment, the World Bank and the Global Resource Information Database (GRID-Geneva) to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. More info: www.mapx.org

 $^{^{\}rm 32}\,\mathrm{A}$ recent partnership has been established between UN Environment and Google.

³³ The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policy-making across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications. The Directive came into force on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021. More info: https://inspire.ec.europa.eu

³⁴ In line with both UN Environment and GEF policies on branding and use of logos.

4.2.1.3 Newsletters (Med Bulletin)

Periodic MedProgramme Bulletins will be published (every six months or on a quarterly basis) to showcase progress of the Programme as a whole and of individual Child Projects, including highlights of results, success stories and project events, and relevant global, regional and national relevant meetings and events. It will be one of the primary tools for tracking achievement of targets and milestones for all Child Projects, based upon the corresponding results frameworks. Bulletins will feature a "journalistic" style making the content appealing for a wide range of audiences. Therefore, all CPs are expected to contribute to these Bulletins with diffe ent types of inputs in order to document their activities and progress, such as high-quality pictures, articles, statistics, quotes, interviews, footage, among others.

4.2.1.4 Storytelling for advocacy

A number of traditional storytelling instruments will be blended with innovative and creative approaches to increase dissemination and advocacy efforts. Particular emphasis will be given to the preparation of high-quality short movies, animations and documentaries, graphic novels³⁵, documentaries, podcasts³⁶/ radio programmes, infographics, art exhibitions, digital interactive stories/articles/interviews, professional photos, microblogging, e-books, art exhibits, among others. The MedPCU will collect diffe ent multimedia material from the CPs necessary to prepare these products. Translations of key communications outputs will be carried out in English, French and Arabic to ensure ample dissemination in the participating countries. Specific translations in other national languages will be sought pending budget constraints and upon due consideration of stakeholders' needs.

4.2.1.5 Social Media

Facebook, Instagram, YouTube and Twitter are four social media tools suggested for use by the MedProgramme. Development of timely and appropriate content and material to populate these channels is indispensable to achieve the desired impact. CPs will be prompted to contribute with relevant and ad-hoc information, pictures, statistics and other data to enrich the social media campaign.

The use of hashtags will be coordinated with the GEF IAs and EAs and project and country representatives of the Programme in support also of other related initiatives and campaigns.

The registration on the above-mentioned channels (or a selection of them) will take place at the beginning of the Programme and content population will start as soon as data and information from the projects becomes available.

4.2.1.6 Participation to global campaigns, events and processes

Experiences and lessons learned from the MedProgramme will be of relevance for a number of global processes shaping polices related to the sustainable management of natural resources in coastal areas. In turn, global processes are important for the MedProgramme to align with national, regional and global priorities and be receptive to new "waves" (policies, socio-economic trends, tech advances, etc). MedProgramme activities in this sense will build on existing successful campaigns, for example the "ICZM Mediterranean awareness-raising Strategy (MARS)". Contribution to these events will take diffe ent forms, ranging from physical attendance, production of specific products, content and multimedia material to be packaged in suitable products, among others. Examples of processes and events that could be relevant for the MedProgramme include the Agenda 2030 and SDGs conferences, the United Nations Environment Assembly (UNEA), Mediterranean-wide policy-dialogues, the UN Environment campaigns against chemical and plastic pollution, the EU Development Days

³⁵ Graphic novel or graphic journalism" is an increasingly popular literary genre that uses comics and poignant texts to explain complex matters. It is a compelling way of storytelling for scientific dissemination.

³⁶ A mix of radio and audiobooks, podcasts are a very incisive and entertaining way of sending messages across and inform and spark debate on pressing issues. They are easy to share and can reach a vast and varied audience.

and other key gatherings at the EU level, International Days (such as Coast Day, Environment Day, World Water Day, Health Day, etc), among others.

4.2.1.7 Engagement with media and testimonials

The MedPCU will reach out to a diffe ent number of media outlets and journalists with a view to establish long-lasting collaborations. To this end, CPs will be asked to liaise with national and local media of the project countries (for instance, by providing the MedPCU with a list of relevant contacts). A series of direct interactions with communications specialists, media experts and social media influencers is foreseen throughout the duration of the Programme to increase mutual understanding and flow of information. The MedPCU will also reach out to renowned personalities from diffe ent realms (such as art, sports, entertainment or fashion) to invite them to serve as ambassadors for the Programme and raise awareness about the main environmental challenges (and solutions) in the coastal areas of the Mediterranean. CPs will be prompted to suggest names, and facilitate contacts when possible, of suitable and potential "goodwill ambassadors" of relevance in the region.

4.2.1.8 Launching/Closing events of the MedProgramme

The design and practical details of these events will be planned during the inception phase of the MedProgramme. Considering the staggered initiation timeframes of the diffe ent Child Projects, a launching event of the MedProgramme could be organized in the form of a press conference to coincide with the kick-o` of the Support Child Project 4.1. Basic communications material about the objectives of the MedProgramme (such as visual identity, slogan, mission statement, description of Child Projects, informative brochure, short promo video, basic online pages, etc) should be prepared prior to the launching event. Participation to these events will not necessarily be open to the large public, however the information and messages emanating by these two occurrences will be relevant for a general audience as well.

4.2.2 Forging and nurturing Partnerships



If you want to go fast, go alone. If you want to go far, go together. -African Proverb



Opportunities to enlarge the existing partnership of the MedProgramme should not only be welcomed, but actively sought. By reaching out to diffe ent stakeholders – individuals, organizations or companies – and engaging them directly in selected MedProgramme activities, a series of distinct advantages will be produced. These include:

Contributing to transformational change: groups that are likely to evade the radar of "usual suspects" mapping (intended as classic stakeholders for environmental projects) will be intentionally targeted, moving away from the old-fashioned top-down view of passive beneficiaries of knowledge to a new vision in which conscious citizens are regarded as source of knowledge and potential allies in the strive against environmental degradation. For example, a collaboration with Faith-Based Organizations³⁷ to prepare a workshop or joint statements disseminated through their networks would tremendously increase the chances to inform and influence a large portion of general public that is not reached by traditional channels. Another possibility is a partnership with a fashion magazine to sensitize readers about sustainable business in coastal areas.

³⁷ Faith-Based Organizations could be a very important stakeholder group to engage in environmental decision-making. "Religion plays a significant role in the understanding and shaping of attitudes, opinions and behaviours including for management and use of the environment and natural resources". UN Environment Foresight Brief 008, April 2018.

- Facilitating a more rapid achievement of the Programme results: for example, a partnership with tourism
 institutions in the diffe ent participating countries could accelerate the adoption of more sustainable
 touristic habits to reduce pollution load into water bodies and increase the acceptance and reuse of
 treated freshwater for human consumption.
- Raising the profile of the GEF investments in the Mediterranean and of the countries and partners
 participating to the effort. A partnership with National Geographic for instance, or with national TVs
 and radio stations, could enhance the dissemination of knowledge and results generated by the
 MedProgramme as well as by related initiatives and policy-frameworks, like the Barcelona Convention.
- Further stimulating a sense of ownership and contributing to the sustainability of Programme results:
 making tight connections for example with the Bibliotheca Alexandrina to host a permanent or
 temporary exhibition about the MedProgramme, which could then travel around museums of the entire
 Mediterranean basin (starting with participating countries), and thus ensure that the legacy of the
 MedProgramme will continue to inspire people even after the programme closure.
- Providing additional means to further expand Programme activities: by adding ad hoc co-financing (cash or in-kind) to produce, for example, through a publication or a short movie for the general public, the MedProgramme could gain positive returns in terms of resources and reputation. Bringing together renown artists from project countries and the private sector to jointly produce a graphic novel on the MedProgramme, for instance, could be rewarding in many regards.

The MedProgramme holds the possibility to create a fertile hub for diffe ent partners to come together and share experiences and solutions to common challenges related to environmental degradation and pollution of freshwater/marine waters in the region. The private sector is a prime stakeholder in this effort and should be always engaged to cross-fertilize the MedProgramme's interventions. As emphasized in the GEF 2020 strategy: "Coordination failures abound in environmental management, in part because of the prevalence of 'tragedy of the commons' issues. Moreover, the complexity of environmental challenges requires that actions be taken simultaneously by many diffe ent stakeholders to be effective; [...] Partnerships with the private sector, civil society, research groups, and indigenous and local communities are vital in this regard."³⁸

The importance of tightening relations with the private sector is again stressed in the GEF 2020 strategy: "The IAPs (Integrated Approach Pilots) will give special attention to engaging the private sector and improving evidence-based design and implementation to enhance learning and the effectiveness of the IAP interventions." "39

Furthermore, in strengthening collaboration with a vast and diverse, yet relevant, groups of stakeholders, the MedProgramme will contribute to the vision encapsulated in the Sustainable Development Goal 17: "A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level."

³⁸ 2020 Strategy for the GEF, April 2015. p.27 Full document: https://www.thegef.org/sites/default/files/publications/GEF-2020Strategies-March2015_CRA_WEB_2.pdf

³⁹ 2020 Strategy for the GEF, April 2015. p.22 Full document: https://www.thegef.org/sites/default/files/publications/GEF-2020Strategies-March2015_CRA_WEB_2.pdf

4.3 Policy and Decision-Making Level

The Contracting Parties of the Barcelona Convention, relevant decision makers in the region, technical practitioners as well as GEF Implementing and Executing Agencies are supported in their work through contributions to relevant regional policy processes and related GEF initiatives (particularly through the IW:LEARN project).

4.3.1 Strengthening the Science-Policy Interface (SPI) and Influencing Decision-Making

4.3.1.1 Replication Atlases

A number of highly informative National Replication Atlases, translated in relevant languages, will be produced to stimulate replication of successful practices demonstrated by the Programme and encourage regional and global dialogue. Broader adoption and replication of the successful policies, practices and technologies implemented under the Programme will be promoted through these means, highlighting areas and situations where replication of the Programme's demonstrations should preferentially occur.

Relevant results of Child Projects will be featured in the Atlases and the MedPCU will inform about the participatory process to collect and present the inputs.

4.3.1.2 Agenda 2030 and the Sustainable Development Goals

The MedProgramme will produce regional environmental benefits contributing to the Sustainable Development Goals, in particular the goals on responsible consumption and production (SDG 12), climate action (SDG 13), life below water (SDG 14), and life on land (SDG 15), which reflect to a large extent the GEF's core mission. By fighting environmental degradation in coastal areas and improving livelihoods, the MedProgramme is supporting beneficiary countries, and all populations living in the Mediterranean basin, to increase their capacity to build climate resilience, reduce pollution from nutrients and persistent toxic substances (POPs and Mercury), sustainably manage coastal freshwater and marine resources, protect biodiversity, and restore coastal ecosystems. Moreover, its focus on improving freshwater quality and quantity will directly contribute to SDG 6 on water and sanitation, while a dedicated gender strategy will ensure compliance with the SDG 5 on gender equality and women's empowerment.

4.3.1.3 Supporting countries to implement IMAP

Since the 2005 Mediterranean TDA, the situation in the Mediterranean in terms of transboundary issues in the marine and coastal areas has evolved. In terms of monitoring, the adoption in 2008 of the EU Marine Strategic Framework Directive (MSFD) led to the development in EU countries of national monitoring plans based on a set of detailed common criteria and indicators. UN Environment/MAP initiated the Ecosystem Approach in 2008, which led to the adoption of 11 Ecological Objectives, 61 indicators and definition of GES and targets in 2012 at the COP17of the Barcelona Convention. This led to the Integrated Monitoring and Assessment Programme (IMAP) for the Mediterranean, which was adopted in 2016 at the Barcelona Convention COP19. IMAP is the best available common set of tools for informing the science-policy interface (SPI) which is critical to achieve meaningful progress on stress reduction. Now the challenge is for countries, especially the non-EU countries, to redesign their national monitoring programs in line with IMAP and the 23 common indicators covering also the areas beyond national jurisdiction. Regarding monitoring of pollution, countries will build upon their MED POL monitoring program and database that has been in existence since 1999, with agreed parameters and stations in key hotspots and coastal areas. However, very few data exist for the majority of the common indicators, other than some contaminants, nutrients and chlorophyll data, particularly in the GEF eligible countries of the Mediterranean.

4.3.2 Contributing to the GEF knowledge base

The results produced by the MedProgramme (hot spots of coastal/marine pollution and habitat degradation, implementing ICZM and nexus planning, conjunctive surface water and groundwater management, protecting coastal groundwater-related ecosystems and coastal/marine biodiversity) will substantially contribute to the GEF knowledge base and to relevant GEF process, events and activities involving the four focal areas of International Waters, Chemicals and Waste, Biodiversity, Climate Change. Technical practitioners and scientists are also addressed as direct consumers of technical reports and assessments, and they are key agents to strengthen the science-policy interface.

4.3.2.1 Technical reports and scientific publications

The MedPCU will ensure that relevant scientific reports and scientific peer-reviewed publications are prepared by the various CPs providing technical information about the achievements of the Programme.

4.3.2.2 Synergies with the GEF IW:LEARN and LME:LEARN Projects

The MedProgramme will closely collaborate with the GEF International Waters Learning and Resource Exchange Network (IW:LEARN) Project⁴⁰ to facilitate uptake of lessons learned and knowledge exchange from/to the MedProgramme portfolio.

Cooperation in the following activities will be particularly addressed:

- Participation to the GEF International Waters Conferences (landmark biannual events of the IW portfolio). The first MedP ogramme contribution is expected for the 10th edition of the IWC in 2020.
- Production of Experience Notes (short case studies) produced by Child Projects to showcase worthy results and disseminated through IW:LEARN channels and the MedProgramme KM platform. The format of Experience Notes is standard (https://iwlearn.net/documents/experience-notes)
- Participation to IW:LEARN Twinnings with other GEF relevant projects and programs.
- Contribution to IW:LEARN.net with specific content (i.e. data visualization).
- Contribution to social media, news, events, etc.
- Participation to GEF Communities of Practice (CoPs) on IW, CW, when relevant.

4.4 Governance

Both the strategy and its implementation are critical to successful exploitation of knowledge. Many KM strategies fail not because there is something intrinsically wrong with them, but because they are not well implemented.

There must be a good strategy, but also appropriate organizational structure, systems, resources and the right people to execute it.

It is crucial to create teams that are centers of excellence for their specific knowledge skills and experience. Also, the appropriate technical equipment (hardware and software) and adequate expertise are key ingredients to ensure expected results. The GEF STAP concurs with the need for adequate resources noting that "KM delivers cost-efficiencie" and savings, for example, reduced failure of projects, and it needs upfront resourcing to cover for additional time, specific tools and database needs. [...] KM professionals are essential in applying the discipline, including creating tools and products that help establish KM as a standard practice throughout the organization⁴¹".

⁴⁰ More info at www.iwlearn.net

The KM strategy of the MedProgramme will require diffe ent sets of expertise for its execution. It is anticipated that the following professional profiles will be required throughout the duration of the programme (either full-time and/or part-time):

- Knowledge Management Specialist (to coordinate the implementation of the KM strategy)
- · Communications assistant (to support the execution of the communications plan)
- Data Analyst (to help harmonize data produced by Child Projects and maintain the database)
- Web Developer (to develop the KM platform)
- IT Specialist (to administer the IT-based platform and systems)
- Experts in copy-editing, video-making, graphic design, translations, etc. to be contracted as needed.

These and other services will be provided by the staff of the MedPCU, consultants hired to carry out specific tasks and by outsourcing the work to companies (such as for the project management tool, hosting providers, licenses, etc).

"Knowledge-sharing is at the crossroads of core and support functions" 42 . Knowledge-sharing tasks and responsibilities should be as much as possible integrated in the jobs descriptions and terms of reference of projects' executing teams.

As efforts leading to an effective knowledge management system can be seen as time-consuming and not immediately benefitting the project outputs, there must be a good system in place to incentivize project teams to dedicate time and resources to KM. As noted by the GEF Strategic Technical Advisory Panel (STAP⁴³): "there needs to be better recognition for KM inputs, achievements and publicity. Rewarding projects at midterm, for example, for demonstrating the use of knowledge to improve and/or adapt the project to meet project objectives may be an effective incentive". The form of these rewards can vary, but in the case of the MedProgramme they can range for instance from prizes announced at the Annual Stocktaking Meetings, to public recognition mentions (internally or externally the portfolio, such as in the Med Bulletins), among others.

⁴¹ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 9

⁴² Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO. p. 24.

⁴³ Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 9

5. Legacy and Sustainability



Share your knowledge. It is a way to achieve immortality. -Dalai Lama XIV



The benefits arising from managing knowledge properly are both far reaching and hard to measure. This strategy represents one of the first attempts to manage knowledge holistically within a GEF-financed program with multi-focal areas Child Projects, and the role played by the Support Child Project 4.1 in implementing the programme-wide KM strategy is innovative yet challenging. The envisaged result is to effectively support portfolio coordination, provide beneficiary countries with long-lasting capacity and tools to improve national and transboundary coastal ecosystems, and enrich the GEF Partnership with replicable solutions and lessons learned for future interventions in the Mediterranean region. Its success will be determined by the commitment and ownership of all executing partners and stakeholders, in addition to adequate resources and means in place. Its sustainability will translate into reinforced capacity (information, expertise, awareness...) of MedProgramme stakeholders to address environmental challenges making use of a modular knowledge hub which will continue to evolve after the programme ending.

The contracting parties of the Barcelona Convention will be the custodians of the KM structure implemented for the MedProgramme and will carry forward the legacy of the MedProgramme by supporting informed decision-making, paving the way for more investments and interventions, and encouraging broader adoption and knowledge transfer to improve environmental security in the coastal areas of the Mediterranean.

GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" GEF ID 9607

Implementing Agencies





Leading Executing Agency



Executing Partners



















ANNEX T

THE MEDITERRANEAN SEA PROGRAMME: ENHANCING ENVIRONMENTAL SECURITY (2019 – 2024)

GENDER MAINSTREAMING STRATEGY

UN ENVIRONMENT/MEDITERRANEAN ACTION PLAN OCTOBER 2018

This strategy was prepared during the Project Preparation Grant (PPG) phase
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1. Introduction

1.1 Defining Gender Mainstreaming – from 1997 to 2017

In 2017, shortly after the 23rd Conference of the Parties (COP) in Bonn concluded with the 'Fiji Momentum for Implementation', the United Nations Framework Convention on Climate Change (UNFCCC) announced its pioneering Gender Action Plan. The COP23 Presidency underscored the priority of the Plan¹ to increase awareness of, and generate support for the development and effective implementation for, gender-responsive climate and environmental action. Showcasing not only the consensus of the State Parties on these key issues, this critical achievement encapsulates the growing international efforts towards gender mainstreaming and the integration of gender equality perspectives in sectoral policies and programs, since articulated by the UN Economic and Social Council (ECOSOC) twenty years ago.

In July 1997, the Group of Specialists on Mainstreaming, appointed by the ECOSOC, laid out the tenets of gender mainstreaming, which continue to spur and inform UN action:

"Gender Mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and social spheres so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality".

Elaborating upon this definition, the Division for the Advancement of Women on Gender Mainstreaming, added:

"Gender Mainstreaming requires more than a quantitative change in numbers of women and men participating in, or benefiting from, policies and programs. It requires a transformation of all sectoral policies at all levels, and of institutions, organizational practices, attitudes and systems that shape them so that they fully consider the realities, needs, and views of women."

The conceptualization and definition of Gender Mainstreaming, as presented above, derives from, and builds on, the preceding conversation of inclusion of women and gendered considerations in development policy. To elucidate, it does not represent a 'totally' new approach – but rather, a unique take on gender and developmental policy antecedents dating back to the early 1970s. Functioning as a pivot, gender mainstreaming builds on the Gender and Development (GAD) approach, which differentiates itself from the preceding Women in Development (WID) and Women and Development (WAD) approach, by discarding the notion that gender perspectives should automatically entail the demarcation of women as a target group. The image below⁴ visualizes the timeline of these different approached leading up to gender mainstreaming, the approach chosen for the Mediterranean Sea Program (MedProgramme): Enhancing Environmental Security Gender Strategy towards

See <u>Recommendations of the Subsidiary Body of Implementation on Gender and Climate Change</u> (Agenda No. 20). UNFCCC. (2017)

See <u>Gender Mainstreaming: An Overview</u> for more. United Nations. (2002)

Ibid.

The image was developed by the author from: Rathgeber, E. "WID, WAD, GAD: Trends in Research and Practice". International Development Research Centre (Ottawa). Paper Presentation at the meetings of the Canadian Institute for the Advancement of Women held in Quebec City. (1988)

incorporating gender-responsive project outcomes, gender-sensitive policy formulations, and gender-aware decision-making.

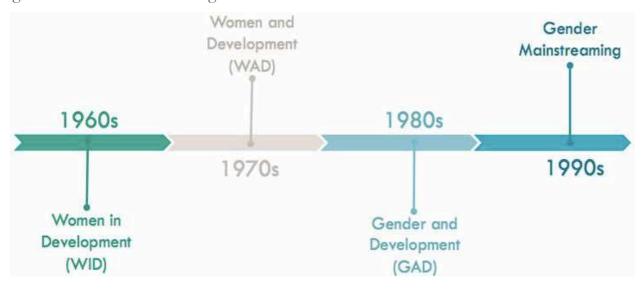


Figure 1: Timeline towards present-day Gender Mainstreaming approach. (adapted from Rathgeber [1988] by author)

1.2 Global Environment Facility (GEF) and UN Environment

Keeping with the above mandate of gender mainstreaming and promoting women's empowerment, both the GEF and UN Environment have prioritized delivering inclusive and gender-responsive environmental results, and adaptation and mitigation solutions towards climate risks.

Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in November 2017⁵ at the 53rd Council Meeting, shifting the focus from a 'gender-aware, do no harm' approach to a 'gender-responsive, do good' approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow the GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environment benefits.⁶ More recently, the GEF-7 Programming Directions, prepared by the Secretariat in the April 2018 Stockholm meeting further clarifies the GEF's evolving and progressive gender strategy – by providing action points for each GEF focal point.⁷ It lays out clear gender standards for each domain under the GEF, and for the MedProgramme, gender directives of the:

- a. Biodiversity focal area (such as: assessments to understand gender-disaggregated biological resource, providing women and other natural resource-dependent groups equal partnership in protection management);
- b. Climate Change focal area (such as: incorporating action points to address the different climate risks faced by men, women, boys and girls and providing adaptation alternatives that improve the status quo);

See here for the latest <u>GEF</u> Gender Mainstreaming guide (EN). GEF. (2017) (publication)

^{6 &}quot;A new Policy on Gender Equality for the GEF". GEF official website. (2017) (news update)

GEF-7 Replenishment – Programming Directions. Meeting Report from the 4th meeting held at Stockholm, Sweden for the Seventh Replenishment of the GEF Trust Fund, in April 2018.

- c. Chemicals and Waste focal area (such as: understanding the socioeconomic dynamics that expose men and women to different chemicals, as well as their biological implications),
- d. IW focal area (such as: gender assessments and social analysis during project preparation, and differentiated reporting of output indicators and additional measures based on the GEF's Gender Action Plan⁸) are particularly relevant and have been incorporated as action points for the

are particularly relevant and have been incorporated as action points for the operationalization for this Strategy.

UN Environment recognizes the role of gender equality as a 'driver of sustainable environment development'9, particularly to enhance environmental security and climate resilience; to assuage the stresses on natural resources and dependent communities, including unsustainable management of coastal resources; and to preserve the health of large marine ecosystems (like the Mediterranean) which provide environmental and economic services to coastal populaces. Overall, the organization focuses on the increased visibility and capacity of vulnerable groups in sustainable development policy- and decision-making. To that end, the agency has produced a lessons-learnt report¹⁰, through gender case study compilation, on issues homologous with the overall MedProgramme agenda: gender integration in Integrated Coastal Zone Management (ICZM) and Integrated Water Resources Management (IWRM), marine and coastal pollution, coastal disaster risk reduction and climate change adaptation, coastal developmental planning, and advocacy for gender-inclusive marine ecosystem management and research.

1.3 The MedProgramme Gender Mainstreaming Strategy

The MedProgramme represents a pioneering effort, being the first GEF programmatic multi-focal initiative in the Mediterranean region, aiming to operationalize agreed-upon priority actions to reduce major transboundary environmental stresses in its coastal areas, while strengthening climate resilience and water security, as well as improving the health and livelihoods of coastal populations. The MedProgramme will be implemented in nine beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. The Lead GEF Agency is UN Environment¹¹. Its eight Child Projects¹² cut across four different Focal Areas of the GEF (Biodiversity, Chemicals and Waste, Climate Change, and International Waters), and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, government and non-government bodies, industry, research, media, and various other organizations.

[.]

Ibid, p. 55

Gender Equality and the Environment: Policy and Strategy. UN Environment. (2015)

Regional Seas Reports and Studies No. 207 (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)

GEF Lead Agency: UN Environment. Other GEF Agencies: European Bank for Reconstruction and Development (EBRD). Executing Partners: UNEP/MAP, European Investment Bank (EIB), UNESCO International Hydrological Program (IHP), Global Water Partnership (GWP) Med, World Wildlife Fund (WWF), MEDPOL, UNIDO, and IUCN.

At the time of its approval in 2016, the MedProgramme comprised of seven Child Projects. Subsequently, UN Environment/MAP developed a Mediterranean-focused climate change adaptation project, for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF that this SCCF project would be managed, for all intents and purposes, as an additional Child Project of the MedProgramme. Hence, the number of Child Projects now stands at eight.

Seeking to maintain funding agency (GEF) and lead agency (UN Environment) organizational priorities outlined above, as well as preparing for a proactive GEF-7 ready portfolio, this Gender Mainstreaming Strategy, developed in the Project Preparation Grant (PPG – between June to September, finalized in October) phase, will: provide tailored action points to improve the gender status quo in the countries; place gender-responsive activities and gender-aware policy-making at the core of the MedProgramme agenda; and partake as well as further the existing efforts on gender equality, to leverage opportunities for inclusive and accessible environmental and social co-benefits.

2. Methodology

This Gender Mainstreaming Strategy (GMS), as contextualized above, has been tailored for the MedProgramme. Developed with a two-fold framework, the Strategy is informed by: (a) political ecology and gender studies literature¹³ (presented below) to establish a mixed methodology, and (b) Program component- and country-level diagnostics to identify the baseline scenario (Section 3), which the Strategy expects to positively impact with strategic, selective and appropriate mainstreaming measures in project-specific contexts.

At the outset, this Strategy adopts a political ecology lens, which aims to influence policy development, environmental action and investment programs by 'offering chains of explanations' rather than single and disjointed root causes. This perspective, when combined with a gender-lens, highlights the socio-political dimensions of coastal and natural resource access, control, distribution and agency, which further govern issues such as environmental degradation, climate risks and resource management policies.

In the words of Rocheleau (1996), gender is relevant to a political ecology perspective as: "A critical variable in shaping resource access and control, interacting with class, caste, race, culture and ethnicity, to shape process of ecological change, the struggle of men and women to sustain ecologically viable livelihoods, and the prospects of community for sustainable development."¹⁴

Thus, as the Gender Mainstreaming Strategy for the MedProgramme, this Strategy will espouse and embed the use of a combined political ecology- and gender-lens for the constituent projects. This will create a Program-wide focus (albeit, in different site-specific contexts) on understanding the spatially and temporally contingent ways in which gender issues, social relations, and the environment interact. This programmatic approach will, then, be able to consider the gamut of gendered dimensions present in the Mediterranean, such as: gender division of labor, male and female participation in labor, gendered environmental rights and responsibilities, environmental politics and governance, and collective action and resilience.

Secondly, the importance of gender-relevant and vetted data to provide empirical evidence to the policy and program needs is prioritized. Thus, available data indicators (particularly,

Rocheleau, D. E. Gender and Environment: A Feminist Political Ecology Perspective. (1996)

6

Bauhardt, C. & Harcourt, W. Feminist Political Ecology and the Economics of Care. (2018) has been a critical influence on this Gender Mainstreaming Strategy.

from the World Bank Gender Data Portal and UNDP indices) and country-specific (and where available, local site-specific) statistics have been extensively used to justify the concerns raised by the Strategy. The data on each country has been collated through gender diagnostics of desk-reviewed literature and secondary statistics, which has further revealed the existing inconsistency and low relevance accorded to gender considerations and corresponding statistics within on-going environmental projects, programs and policies.

Thus, by using gender-relevant data to contextualize its priorities, the Strategy will attempt to set an example and highlight both the need to incorporate targeted and selective gender actions based on empirical data within the MedProgramme, as well as the urgency to bolster internal and country-level monitoring systems for the collection and reporting of sex-disaggregated, environmentally-related data from project, sub-national and national levels.

3. Baseline Scenario for MedProgramme Components

The MedProgramme builds on the significant achievements of the MedPartnership¹⁵ and ClimVar & ICZM¹⁶ GEF Projects. The latter have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability in the region; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries, UN bodies, Civil Society Organizations, bilateral donors and the European Union; tested on the ground feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate-related impacts. However, despite these different successes, the two projects were limited by the lack of adequate gender-responsive planning in their sectoral strategies and programs. This represents a 'missed opportunity', as incorporating the gender-lens from project preparation phase through to the monitoring and evaluation phase aid in the mapping of links between gender and environment, as well as identifying positive synergy and improve social/gender and environment outcomes from the outset. This Gender Mainstreaming Strategy, which has been developed as an input in the MedProgramme's preparation phase with the scope of scaling up in parallel with the advancement of the program cycle, thus addresses the gender-blind baseline represented by earlier initiatives.

The MedProgramme represents a comprehensive and powerful response to the environmental and socioeconomic challenges faced by the Mediterranean, in light of continued degradation of coastal zones, growing impacts of climate variability, and loss of livelihoods and deterioration of social conditions. Its objective is to kick-start the implementation of agreed-upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas, while

Strategic Partnership for the Mediterranean Large Marine Ecosystem-Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and its Coastal Areas (MedPartnership) – GED ID 2600

Integration of climatic variability and change into national strategies to implement the ICZM protocol in the Mediterranean (ClimVar & ICZM) – GED IF 3990.

strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The focus will be primarily on hotspots of land-based pollution, harmful chemicals and wastes (POPs and mercury), and excess nutrients; critical sections of the coastal zone particularly affected by climatic variability, freshwater stress and habitat degradation the efficient and sustainable management of priority marine protected areas; measuring progress to impacts and overall Program coherence. Dedicated Child Projects (eight) will prioritize each of these key issues. The Child Projects will be entry points for gender mainstreaming actions through gender assessments and action plans that determine targeted gender-responsive action through project objectives and outcomes at the project, local and national level.

The following table posits the hypothetical effects of a gender-blind approach to the MedProgramme components (the tentative child project – CP – is mentioned alongside), as opposed to mainstreaming robust gender outcomes within the same:

TABLE I: GENDER-BLIND v. GENDER-RESPONSIVE APPROACH

MedProgramme Component	O (P		What is a <i>gender-responsive</i> approach?
Reduction of land-based pollution in priority coastal hotspots, and measuring progress to impacts	1.1	Top sources of land-based pollution, contaminating marine and coastal hotspots, result out of anthropogenic activities such as usage of heavy metals and untreated dumping in river systems, sewage, litter, plastic pollution, usage of pesticides and fertilizers and synthetic organic compounds. ¹⁷ Due to the ubiquitous access and usage of marine resources, the coastal populace is vulnerable to the detrimental effects of	Oxfam's Handbook of Development and Relief provides one of the pioneering accounts of the connections between poverty and environmental degradation, noting a 'downward spiral of cause and effect' — 'poverty can cause environmental degradation, as poor people over-exploit already strained resources, and environmental degradation causes further poverty as people are unable to find the resources to meet their daily needs. 'AB Environmental change, climate disruptions and damage to marine systems and coastal zones have gendered impacts, and women and men shoulder these burdens differently. In what is identified as the 'feminization of poverty' or women's increasing burden of and share in global poverty, economists and development analysts have observed that 'women constitute an estimated 70% of the world's poor people, and households headed by

Eade, D. & Williams, S. The Oxfam Handbook of Development and Relief. (1994)

Windom, H. L. "Contamination of marine environment from land-based sources" in *Marine Pollution Bulletin*, (Vol. 25, No. 1-4). (1992)

1.	land-based pollutants, and therefore, marine pollutants, both in health and livelihood indicators.	women alone are the world's poorest households as a general trend.' For example, environmental degradation-induced livelihood impacts are differentiated in coastal areas – fishing communities, based on local gender norms and informal nature of work, relegate remunerative activities (which often tend to be associated with risk, like 'going out
1.:		to the waters) to the men, while women perform post-harvest work, which may not always be remunerated properly, if at all. The gendered allocation of remuneration, thus, creates a disparity in economic capital, and in turn impedes the capacity to adapt to environmental change and climate disruptions. Marine contaminants threaten both human health and the health of marine organisms. However, health impacts are gender-differentiated as well. Many marine and coastal contaminants are particularly dangerous for pregnant women and lactating mothers, as well as for fetal development. ²⁰

9

Ibid.

See <u>Global Gender Environment Outlook</u>, Section 2.5 for more. UN Environment. (2016)

Enhancing sustainability and climate resilience in coastal zones

2.1

According to a recent report²¹, ocean-related activities in the Mediterranean Sea generate an annual economic value of 450 billion dollars with economic assets for coastal economies and communities amounting to 5.6 trillion dollars. The need for enhancing sustainability and climate resilience in the region is crucial, as the Mediterranean is experiencing a number of immediate coastal problems, which require both short-term and long-term coastal management. Regional scale studies indicate that the Mediterranean is particularly vulnerable to increased flooding and saltwater intrusion as sea levels rise.²² The region has also been marked out as a 'hot spot of climate change', with an increase in air temperature range of 2.2°C to 5.1°C predicted over the period of 2080 -2099.²³

While impacts of environmental degradation and climate risks are undoubtedly severe for the entire coastal populaces, men and women, privileged and vulnerable communities, young and the elderly shoulder burdens unequally. Often the vulnerable and marginalized groups are limited by the exclusion of their needs and perspectives from regional negotiations and management policies.

The immediate and long-term coastal problems being faced by the Mediterranean have implications for complex gender relations in the region, which are a kaleidoscope²⁴ of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities.

The European Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pressures on natural resources and coastal and marine ecosystems, and climate risks. For the northern Mediterranean countries (the Western Balkan nations), labor market dynamics exhibit a significant gender gap: women's employment rates (especially for marginalized communities such as Romas) are lower, along with an existing gender wage gap. Since economic capital is among the important determinants of coping capacities to external shocks (in this case, water stress, degradation of coastal aquifers, loss of

See *Reviving the Economy of the Mediterranean Sea: Actions for a Sustainable Future* for more. WWF and The Boston Consulting Group. (2017)

Nicholls, R. J. & Hoozemans, F. M. N. "The Mediterranean: vulnerability to coastal implications of climate change" in *Ocean and Coastal Management*, (Vol. 31, No. 2-3). (1996)

See <u>Climate Change and Energy in the Mediterranean</u> for more. European Investment Bank. (2008)

24 See <u>this report</u> by the Union for the Mediterranean (UfM) regarding an action plan towards investing in gender equality in the region.

			111 111 1 1 1 1 1
	2.2		coastal livelihoods, climate impacts et al), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable. The 'double disadvantage' of the situation should also be reckoned with: due to lack of viable economic capital, vulnerable groups are often excluded from socio-political control over coastal zone and water resources (coastal aquifers, particularly) management policies – increasing the possibilities of exposure to the threats looming in the Mediterranean region. For MENA countries, coupled with barriers to the labor market and employment opportunities, women face institutionalized exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women's capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms and entering both the work force
	SCCF		and the public space. The gains achieved through social change in this region may not keep pace with the risks and threats arising from the lack of proper management policies for natural resources and the coastal zone, and growing threats of climate change and environmental degradation in the region. As with the European Mediterranean countries, burdens of emerging risks and shocks may fall on the vulnerable groups. (Refer to footnote 12, for more information on the SCCF Project – and why it is a Child Project under the MedProgramme)
Protecting marine biodiversity	3.1	The Mediterranean's biodiversity underpins the ability of ecosystems	Until recently, there was a lacuna in the empirical and normative literature on gender and marine biodiversity. However,

		to provide humans with	with reviewed studies on the role of
		the services they require	gender with respect to conservation,
		to survive – although as	particularly that of mangroves and their
		Hooper shows,	ecological significance, brought to light
		delineating the role of	the clear link between gender and
		biodiversity in	biodiversity and conservation outcomes.
		ecosystem services and	According to the Convention on
		relative roles of	Biological Diversity, considering gender
		difference functional	issues in relation to biodiversity involves
		groups has been	identifying the gender roles and relations
		extremely complex. The	have on the use, management and
		Mediterranean's	conservation of biodiversity.
		predominantly coastal	To begin with, this MedProgramme
		population is	component should address the knowledge
		increasingly threatened	gap regarding gendered biodiversity
		by the loss of	practices in the region, through extensive
		biodiversity, due to	data and information collection,
		mismanagement and	stakeholder consultations and focused-
		unsustainable use, and	group discussions. This would contribute
		this situation is projected	towards gender-responsive policies within
		to worsen with the	marine resource management and
		coupled effects of	biodiversity conservation plans that can
		human-induced climate	increase the sustainability of outcomes by
		impacts, such as	incorporating artisanal and traditional
		warming sea surface	knowledge gathered from both women
		temperatures, altering	and men. Exposing gender-differentiated
		ocean chemistry and	biodiversity practices ²⁶ will also help
		increasing run-off of	demarcate the different levels of harm
		land-based pollutants	caused by different groups (income-
		and sediments. ²⁵	generating activities, traditionally
		Resuscitating and	relegated to men, may be more
		protecting these marine	exploitative in some instances), as well as
		ecosystems, which form	the inequalities in control of resources.
		the resource base for	Biodiversity conservation plans can be
		coastal economic and	truly effective if they address poverty,
		social activities, requires	inequality and resource access dynamics
		all possible expedition.	among coastal communities. ²⁷
		Knowledge management	Robust coordination and knowledge
Knowledge		and program	management strategies panning the
management		coordination, if carried	MedProgramme have to be
and program	4.1	out with a top-down	operationalized to ensure its success.
coordination		approach and without a	Given the breadth and value of the
		stakeholder-facing	initiative, as well as the numerous
		participatory approach,	partners and focus points, these strategies
		risks excluding the needs	will ensure: stakeholder representation

Lockwood, M. et al. "Marine biodiversity conservation governance and management: Regime requirements for global environmental change" in *Ocean and Coastal Management*, (Vol. 69). (2012)

See the gender tab on Convention on Picture 182.

See the gender tab on *Convention on Biological Diversity* for more.

The Secretariat of the Convention on Biological Diversity hosted a meeting in Bangkok (December 2017) to develop training material to advance gender inclusion in biodiversity planning in the Asia-Pacific region. See the reporting here.

and concerns of beneficiaries. Additionally, procedural and red tape hurdles tend to disproportionately affect those with limited resources and access to governing mechanisms, support organizations and implementing agencies. and engagement, technical and administrative coordination of the program; establish a commune of practice and initiative among different stakeholders and partners; management of knowledge generated on an accessible platform (both data and normative) as well as dissemination of lessons learnt and best practices in later stages of the program cycle; high-quality and timely systems for monitoring of the Program's progress to impacts. In tandem with a knowledge management and program coordination strategy, a gender mainstreaming strategy for the MedProgramme will be developed to provide critical gender-responsive research inputs for Programme components, as well as to espouse a gender-aware policy in the region, taking stock of the existent inequities and gender norms of the Mediterranean. Gender mainstreaming shall be pursued within the different Child Projects, with tailored gender assessments and action plans determining strategic and selective action to improve the baseline inequality within project- and country-specific dimensions. This will safeguard the interests and priorities of the vulnerable and marginalized communities among the Mediterranean coastal populaces, as well as increase the sustainability and inclusion of the MedProgramme's priorities in the region and contribute to the regional conversation on decreasing inequality, poverty and vulnerability.

4. Baseline Scenario for MedProgramme Countries

The nine Mediterranean countries participating in the MedProgramme (Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia), face different developmental challenges and socioeconomic disparities, as seen from the country profiles, developed for this Gender Mainstreaming Strategy. These data profiles borrow from UNDP's Human Development Index, Gender Inequality Index, and Gender

Development Index. Additionally, they refer to the Global Gender Gap Index (World Economic Forum) and compiles national-level poverty statistics (conducted by national authorities of the nine countries, as well as the World Bank, in some cases). These indices have differing methodologies, and are being employed, at the outset, as indicative (and *not* conclusive) measures of current levels of development, gender equality, and poverty and labor force participation.

As Booysen's research²⁸ shows, composite indices present both challenges and advantages. It should be noted that numerous fallacies have been identified in the methodologies employed in composite indexing. These indices are mainly quantitative, and present empirical and aggregate measures of complex development phenomena, making values apparently objective, at the cost of subjective nuances. Yet, these also remain invaluable as useful supplements to income-based development indicators, understanding relative degrees of development, simplifying complex measurement constructs as well as providing access to non-technical audiences. To balance this dichotomy, ranks have been removed in certain indices and have been linked in the footnoting, and the broader development categories (high/medium/low development) have been used.

TABLE II: HUMAN DEVELOPMENT INDEX (HDI)²⁹

(out of 188 countries – United Nations Development Program – UNDP, 2018)

Defining the HDI: This index measures and combines three basic dimensions of human development (long and healthy life, knowledge and decent standard of living) and provides an overall socioeconomic landscape of a country.

Relevance of the HDI: Since socioeconomic capital and security are crucial determinants of the capacities to adapt towards natural resource stress, loss of coastal livelihoods, marine and environmental degradation, and climate risks, this index indicates how poised each country may be to consider different resource management, resilience, adaptation and mitigation options.

Indicative, not conclusive: In line with Booysen's argument, the HDI should be treated as indicative, not conclusive. It provides an overview of relative degree of development in a particular country but remains a 'synthetic indicator'. Recent research has shown the need to supplement the HDI with other indicators associated with economic and social cohesion, sound development strategies, and sustainability in growth models.³⁰

Country	Rank	Relevance
Albania	68th	With 'high human development', Albania's capacity to adapt to climate risks and variability is pegged well. However, due to regional variation in poverty rates (high in the Kukës prefecture – 22% v. Gjirokastër prefecture (qarks) – 8%, in particular ³¹) in the country, environmental services and social co-benefits may not be equitably shared.

Booysen, F. "An Overview and Evaluation of Composite Indices of Development" in *Social Indicators Research*, (Vol. 59 No. 2). (2002)

²⁹ UNDP. (2018)

Bilbao-Ubillos, J. "The Limits of *Human Development Index*" in *Sustainable Development*, (Vol. 21 No. 6). (2011)

Portraits of Poverty and Inequality in Albania. <u>INSTAT (Albanian Institute of Statistics) & World Bank.</u> (2015)

Country	Rank	Relevance	
Algeria	85 th	With 'high human development', Algeria wields capital, largely derived from its oil economy, in readiness against climate shocks. However, due to high inequality in consumption, high unemployment rates (particularly, women and youth) and largely informal workforce ³² , environmental services and social co-benefits may not be equitably shared.	
Bosnia and Herzegovina (BiH)	77 th	With 'high human development', BiH's capacity to adapt to climate risks and variability is pegged high and similar to Algeria. As a post-conflict nation, however, educational attainment and labor market access continue to be determined by poverty status ³³ in the country, thus, environmental services and social co-benefits may not be shared.	
Egypt	115 th	With 'medium human development', Egypt's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other pressing developmental pursuits. ³⁴ With a volatile political climate, and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.	
Lebanon	80th	With 'high human development', Lebanon's capacity to adapt to climate risks and variability is pegged well. However, due to high concentration of income and wealth in the country ³⁵ and the spill-over effects of the Syrian civil war, environmental services and social co-benefits may not be equitably shared.	
Libya	108 th	With 'medium human development', Libya's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. With a volatile political climate challenging economic stability ³⁶ , dependence on oil production and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.	
Montenegro	50 th	With 'very high human development', Montenegro is poised to adapt well to climate risks. However, due to historic ethnic exclusionism (the Roma population, in particular ³⁷) in the country, environmental services and social co-benefits may not be equitably shared.	
Morocco	123 rd	With 'medium human development', Morocco's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. Pronounced gender inequality in the country slows economic growth ³⁸ , environmental services and social co-benefits may not be equitably shared.	
Tunisia	95 th	With 'high human development', Tunisia's capacity to adapt to climate risks and variability is pegged well. However, due to concentration of income and wealth in the country ³⁹ , high unemployment rates (particularly, youth) and economic unrest challenging political stability, environmental services and social co-benefits may not be equitably shared.	

[&]quot;Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

Poverty and Inequality in BiH. World Bank. (2011)

Inequalities, Uprisings and Conflicts in the Arab World. MENA Monitor. World Bank. (2015)

Assouad, L. "Rethinking the Lebanese Economic Miracle". <u>WID</u>. (2017)

Libya Economic Outlook. World Bank. (2018)

Gender at a Glance: Montenegro. World Bank. (2015)

[&]quot;Reducing gender inequality in Morocco can boost growth". <u>IMF.</u> (2017)

Tunisia: Economic Outlook. World Bank. (2018)

TABLE III: GENDER INEQUALITY INDEX (GII)40

(out of 159 countries - UNDP, 2018)

Defining the GII: This index, showing inequality in achievement between men and women in three aspects (reproductive health, empowerment and labor market), provides a useful gender baseline in terms of health equity, economic capital and financial access, speaking to the gender opportunities of men and women in the countries. This baseline has been elaborated upon using existing gender studies literature on each country.

Relevance of the GII: This index provides a primary understanding of the different levels of achievements on basic development indicators between men and women. This displays useful features towards the gender status quo hypotheses, which could then be derived in the context of this project.

Indicative, not conclusive: In line with Booysen's argument, the GII should be treated as indicative, not conclusive. Pernmayer finds that the functional form of the index could be unclear, particularly the inclusion of indicators of relative performance of women vis-à-vis men, along with absolute women-specific indicators.⁴¹

Country	Rank	Relevance	
Albania Albania 52nd particularly policies pro education as work remainder During the not put in p		In Albania, traditional beliefs continue to influence gender roles, particularly in the household setting. During socialist rule, although policies promoted women's presence in the public sphere (through education and work), the continued responsibility for unpaid domestic work remained with women (leading to time poverty or 'double shifts'). During the transition to a capitalist economy, gender equality laws were not put in place for private sector jobs, and thus, employment for Albanian women could not be safeguarded. ⁴²	
Algeria	100 th	In Algeria, social codes affect women's empowerment. Since labor force participation disparity is pronounced, women lag behind on economic capital needed to combat risks arising from environmental degradation, mismanagement of water and coastal resources, and climate shocks. According to the Arab Barometer, in 2017, compared to 2013, a greater number of Algerians regarded higher education as more important for men, as well as reinforced the notion that married women should be ideally relegated to household duties. ⁴³ This also makes them dependent on the patrilocal structure of Algerian society.	
Bosnia and Herzegovina (BiH)		Despite progress in closing the gender gap in endowments - mainly in education among the younger generation - BiH still faces a number of gender issues, particularly in women's access to economic and employment opportunities. Alongside improved educational outcomes, significant gaps remain in labor market participation and employment in favor of men, as women continue to face challenges in accessing economic opportunities. ⁴⁴ Additional obstacles continue to exist for women in exercising agency (the power to choose and decide options to preserve to act for oneself), particularly managing domestic work, lack of political representation and participation as well as widespread gender-based violence.	

Pernmayer, I. "A Critical Assessment of the UNDP's Gender Inequality Index" in *Feminist Economics*, (Vol. 19 No. 2). (2013)

"Droits des femmes en Algérie: les lois progressent mais pas les mentalités". Middle East Eye. (2017)

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⁴⁰ UNDP. (2018)

World Bank. (2012)

BiH: Economic Mobility, Jobs and Gender. World Bank. (2016)

Country	Rank	Relevance
Egypt	101st	Political, social and economic capitals are not equitably distributed among Egyptian men and women. Without access to these vital resources, the risks identified by MedProgramme will only burden those at the lower echelons of society. Despite improvement of young women's education levels in recent times (Egypt's rank improved by 34 spots in the latest GII quoted here), the workforce participation and retention rates remain unperturbed, signaling a stagnated job market and scarce employment opportunities. Egypt also faces some particular gender-specific barriers in high numbers, such as FGM and sexual harassment, arising out of sexual inequality between men and women in the country.
Lebanon	85 th	Lebanese women face the least gender disparity in the Arab world with their male counterparts. Despite this, discriminatory social codes, particularly the focus on intersectional civil and family laws, continue to impede women's empowerment. ⁴⁶ Although the gender gaps at higher levels of education are reversing, women continue to face entry barriers to the labor market as well as time poverty due to the predominance of unpaid care work.
Libya	38 th	Women in Libya have had a long history of actively participating in the economic, social and political development of the country, going back to the 1950s. Yet, with Gaddafi's introduction of the <i>Declaration of the Authority of the People</i> in 1977 and the <i>Great Green Charter of Human Rights in the Age of the Masses</i> in 1988, these rights were compromised at a substantive level. ⁴⁷ Furthermore, traditional family laws, as a general trend in the MENA region, continue to disadvantage women and exacerbate their time poverty. The 2011 uprisings signaled that women were entering the public space, yet changes in women's empowerment has been sluggish in the past seven years.
Montenegro	32nd	Montenegro is relatively advanced in terms of progress towards gender equality. This enhances the capacities of Montenegrin men and women to face climate-risks and capitalize on adaptation opportunities. However, gender-inequitable dynamics remain in important determinants such as access to labor markets, health equity et al, rendering certain demographics vulnerable.
Morocco	119 th	Political, social and economic capitals are not equitably distributed among Moroccan men and women. Without access to these vital resources, climate risks will only burden those at the lower echelons of society. Gender equity in labor force participation is one of the lowest in the world ⁴⁸ , disadvantaging women further: women lag behind on economic capital needed to combat climate shocks and risks.
Tunisia	63 rd	In Tunisia, traditional social codes affect women's empowerment. Since labor force participation disparity is thoroughly pronounced, women lag behind on economic capital needed to combat climate shocks and risks. This also makes them dependent on the patrilocal structure of Tunisian society. However, the January 2011 uprisings signaled that women were entering the public space, leveraging opportunities for their economic empowerment, ⁴⁹ although it remains to be seen if the force of this societal shift can keep pace with climate risks.

⁴⁵ Egypt: Country Gender Assessment. World Bank. (2010)

⁴⁶ Lebanon: Country Gender Assessment. European Union. (2015)

⁴⁷ Libya: Country Profile. Gender Concerns International. (2015)

⁴⁸ Morocco: Country Gender Assessment. World Bank. (2015)

Gender in MENA Projects: Tunisia. World Bank. (2011)

TABLE IV: GENDER DEVELOPMENT INDEX (GDI)⁵⁰

(grouped in 5 categories, 1: high equality to 5: low equality – UNDP, 2018)

& GLOBAL GENDER GAP INDEX (GGI)⁵¹

(out of 144 countries – World Economic Forum – WEF, 2017)

Defining the GDI & GGI: The GDI (UNDP) index shows the ratio of female to male HDI values. GDI expresses values in deviation, hence, in order to facilitate understanding GDI grouped categories have been used (as grouped by UNDP) to show the absolute deviation from gender parity in HDI values. This further reiterates the results of the HDI and GII (also by UNDP), and shows the real gender gap in human development achievements.

The GGI (WEF) benchmarks 144 countries on their progress towards gender parity on four thematic dimensions – economic participation and opportunity, educational attainment, health and survival, and political empowerment. The Index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, over time.

Relevance of the GDI & GII: Since the GDI and GGI use different methodologies, and are conducted by different agencies, this report does not suggest a causality between the two indices. However, a correlation is undeniable, and both indices pick up similar rates of gender disparity in the MedProgramme countries.

Indicative, not conclusive: In line with Booysen's argument, the GDI & GII should be treated as indicative, not conclusive. Geake Dijkstra and Hanmer find that although gender-related development indices have increased attention towards 'feminization of poverty and underdevelopment', more robust data needs and indicators are required to create aggregate indices that are sensitive to contemporary trends in gendered privation, particularly with the categorization of 'women'.⁵²

Country	GDI – Group	GGI – Rank	Relevance
Albania	Medium-high equality	38 th	Despite being categorized as a country with high HDI, a pronounced gender gap in Albania is evinced from the grouping and ranking.
Algeria	Low equality	127 th	Algeria, with Tunisia, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.
Bosnia and Herzegovina (BiH)	Medium-low equality	66 th	Despite being categorized as a country with high HDI, a pronounced gender gap in BiH is evinced from the grouping and ranking.
Egypt	Low equality	134 th	The gender gap in Egypt is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Lebanon	Low equality	137 th	The gender gap in Lebanon is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.

^{50 &}lt;u>UNDP</u>. (2018)

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WEF. (2017)

Geske Dijkstra, A. & Hanmer, L. C. "Measuring Socio-Economic Gender Inequality: Towards an Alternative to the UNDP Gender Index" in *Feminist Economics*, (Vol. 6, No. 2). (2000)

Country	GDI – Group	GGI – Rank	Relevance
Libya	Medium-high equality	Not available	NA
Montenegro	Medium-high equality	77th	Although Montenegro features among the upper categories of the previous indices, this reveals a more entrenched gender gap. Women lag behind their male counterparts, in a greater amount than expected, despite very high human development achievements in the country.
Morocco	Low equality	136 th	The gender gap in Morocco is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Tunisia	Medium-low equality	117 th	Tunisia, with Algeria, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.

TABLE V: SOCIOECONOMIC FACTORS

Note: This table is compiled from various sources, and determines poverty levels (according to USAID income grouping), rural-urban divide and labor force participation parity in the MedProgramme countries.

*Poverty Level: Environmental degradation and climate change is a threat multiplier, and often its impacts combine with poverty, hence this is an important indicator, corroborating HDI ranking. To illustrate this, the Multidimensional Poverty Index has been used. (The Oxford Poverty and Human Development Institute (OPHI), and UNDP calculate the MPI, for measuring acute poverty in developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations with regard to different indicators: education, health, and living standards. The index not only identifies those living in multidimensional poverty, but the extent (or intensity) of their poverty. The MPI can help the effective allocation of resources by making possible the targeting of those with the greatest intensity of poverty; it can help address some SDGs strategically and monitor impacts of policy intervention.⁵³

*Rural-Urban Divide: Climate risks take different forms in rural and urban areas, but lack of development and investment in rural areas (particularly in the Mediterranean) often impedes adaptive capacities of vulnerable demographics, who also derive their livelihoods (in this case, coastal livelihoods) from managed and natural resources.

*Labor force participation parity (% of working age population active)⁵⁴: In the Mediterranean, one of the prime arenas of gender disparity is labor force participation parity. The region is plagued with high unemployment rates⁵⁵ (12.5% average), and this phenomenon remains a gendered one: women and youth are less likely to be employed than men, as a general trend. Additionally, the existing gap in labor force participation indicates that women possess less economic capital, and are limited to gendered (mostly unpaid care work) roles. This directly correlates to lessened participation in coastal economies and scarce or unstable livelihoods; lack of decision-making power both within the household and larger policy frameworks such as coastal resource use and water management; and, greater exposure to repercussions of marine environmental degradation, water stress and potential climate risks (which often acts as a threat multiplier, in this context).

"Unemployment: The Mediterranean Effect", World Bank. (2012)

See UNDP's Technical Notes (2016) for more.

World Employment and Social Outlook: Trends for Women.<u>ILO</u>. (2017)

Country	Poverty Indices	Rural-Urban	Labor Force Participation (The gender gap is calculated as the difference between women's and men's labor force participation rates — simply, the number of working age men and women employed in a country, ILO 2016)
Albania	1.2% below the National Poverty Line. ⁵⁶ The Multidimensional Poverty Index reveals that 7.2% of Albanians are precariously 'near' poverty.	Diber and Kukes <i>qarks</i> (prefectures) show lowest rates of urbanization, and related issues: fragmentation, population decline, <i>et al.</i> Tirana and Durres, on the other hand, have the highest level of urbanization and best performance on demographic and geographic indicators. ⁵⁷ Rural to urban migration is common, and often unbridled, leading to environmental complications as well as socioeconomic tussles.	39.3% female 60.7% male During the socialist rule, the government policy of full employment boosted female participation and, as a consequence employment rates were higher than the average figures of the OECD countries. Policies such as investment in childcare facilities and female education stimulated women to enter and remain in the labor market. The market economy disadvantaged women by providing unstable employment opportunities, although education outcomes and employment sectoral options have improved in recent decades, leading to the widening of the gender gap in labor force participation. ⁵⁸

Regional disparities in Albania. <u>UNDP</u>. (2010)

⁵⁷

Regional disparities in Albania. <u>UNDP</u>. (2010)
Garcia-Pereiro, T. "The Determinants of Female Employment in Albania". Open access on <u>ResearchGate</u>. (2016)

Algeria	11.8% below the National Poverty Line. ⁵⁹ The MPI is unavailable for the country. However, the Ligue Algérienne pour la Défense des Droits de l'Homme (LADDH) reports that about 35% (14 million) of Algerians are in poverty. ⁶⁰	Poverty in Algeria has a distinctly urban face: 75% of the country's poor live in cities, undertaking informal jobs without access to social safety nets. Additionally, the disproportionate rates of urban poor show that the incidences of poverty in the Algerian Sahara are twice as much than among people living in the Steppe. ⁶¹	19.0% female 70.4% male Female labor force participation is low in Algeria, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. ⁶² However, according to ILO, the status quo is slowly altering (although not quite at an ideal pace), as there are marked difference between participation rates from 2011 to 2018. ⁶³
Bosnia and Herzegovin a (BiH)	15% below the National Poverty Line.64 The MPI reveals that 3.2% of the populace are precariously 'near' poverty.	BiH remains one of the most rural countries in Europe – with over 60% of its populace residing in rural areas. 65 The rural poverty rate is higher than urban areas, although income dynamics are similar. 66	34.4% female 58% male Between the years 1992-1995, Bosnia and Herzegovina went through a destructive war that resulted in mass emigration of around 50% of the total population. In the period after the war, although considerable number of refugees returned, it remains unclear how the jobs market was affected around the time. With the failing of the state's strong social protection services such as long-term care, child care and elderly care, and new categories of 'returnee refugees' and 'internally-displaced people', women bear the brunt of unpaid care work. Although more women attend university than men, they continue to face sociocultural barriers in entering the labor force. ⁶⁷

Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

See <u>Ligue Algérienne pour la Défense des Droits de l'Homme</u>(LADDH)for more.

^{61 &}quot;Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

Women face the highest proportion of legal restrictions (*de jure* discrimination) in the MENA region, as well as sociocultural norms (*de facto* discrimination) that stipulate limits to women's entry in the public, and working sphere. Young females are particularly discouraged from seeking employment.

This <u>ILO report</u> (2014) expounds on the factors affecting employment and labor force participation in Algeria.

Poverty and Inequality in BiH. World Bank. (2011)

⁶⁵ Rural Development in BiH: Myth and Reality. UNDP. (2013)

⁶⁶ Poverty and Inequality in BiH. World Bank. (2011)

This <u>ILO report</u> (2011) expounds on the factors affecting employment and gender in BiH.

	27 00/ 11 +1	Danianal diamentales	22.8% female
Egypt	27.8% below the National Poverty Line. ⁶⁸ Although extreme poverty has been virtually eradicated, Egypt is yet to turnaround the effects of the 2011 Arab Springs on its economy, leaving a third of Egyptians in precarious poverty. Particularly, high inflation over 2015-17 has lowered the purchasing power of households. ⁶⁹	Regional disparities continue to be a part of the country's landscape, with upper rural Egypt showing poverty rates three times higher than metropolitan Egypt. ⁷⁰	Female labor force participation is low in Egypt, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. ⁷¹ This is a significant loss as including women and enabling conditions to retain them in the workforce can boost the growth rate of the Egyptian economy. ⁷² In recent times, Egypt's performance on health and education indicators is improving, and this could change labor dynamics.
Lebanon	30% below the Middle-Income-Country Poverty Line.73 Although GDP increase in Lebanon remains steady, the country faces the economic and social impact of the Syrian crisis. With the influx of 1.5 million refugees, Lebanon's public finances, service delivery, and the environment have been strained, increasing poverty headcount and unemployment.74	Lebanon's population is 87% urban, concentrated particularly in Beirut. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector. In the rural areas, different causes entrench poverty: social protection and government service delivery are limited in these remote and mountainous regions.	Female labor force participation is low in Lebanon, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. This is a significant loss as including women and enabling conditions to retain them in the workforce can potentially boost the growth rate of the Lebanese economy. The Edmand Female Participation in labor force in the MENA region. The MENA region r

Egypt: Economic Outlook. World Bank. (2018)

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

⁷¹ ILO. Women in Business and Law. (2014)

The Economic Research Forum (ERF), a regional forum on economic research in Arab countries, Turkey and Iran finds that encouraging the participation of women in the labor force, particularly the 'married women' demographic could usher in rapid growth for the Egyptian economy. See here.

Lebanon: Rapid Poverty Assessment. <u>UNDP</u>. (2016)

Lebanon: Economic Outlook. World Bank. (2017)

Find more on Lebanon on the ERF website.

See this AN-NAHAR coverage.

	40% below the Middle-Income-Country Poverty Line.		27.8% female 78.7% male
Libya	Although economic growth is projected to rebound at around 15% in 2018, Libya's oil-dependence does not benefit the majority of the Libyan populace. High inflation coupled with weak basic service delivery have exacerbated socioeconomic exclusion in the country. Libya continues to experience conflict and insecurity.	Libya's population is 85% urban, concentrated particularly in Tripoli, Benghazi, Misrata and Bayda. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector.	Female labor force participation is very low in Libya, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. Women often take on informal sector roles, particularly starting their own small business, despite receiving higher rates of advanced education than men (77% versus 63%). Movement in Libya for women is severely limited and is another deterrent to workforce participation.
	8.6% below the Middle-Income-Country Poverty Line. ⁷⁷	60.5% of the rural populace is classified poor. ⁷⁸	42.5% female 55% male
Montenegro	In Montenegro, there has been sustainable reduction in poverty in the last five years.	In 2010, MONSTAT finds that not only are the rural populace are at a higher poverty risk, they also face more entrenched forms of poverty. ⁷⁹	As the country emerged from dirigisme, social property was privatized, and the economy sprouted 'grey areas' of undeclared or unregulated work. Post-conflict Montenegro is still reeling from the economic effects of war, which increased unemployment (17.8% in 2016) ⁸⁰ and bolstered GDP loss. The Roma populace face entry barriers to the workforce, and employment rates are far below national averages: 47% Roma male and 8% Roma female are employed.
Morocco	15.5% below the Lower-Middle-Income-Country	3 million out of the 4 million poor live in rural areas ⁸²	25% female 74.1% male

The middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$5.50/day. World Bank. (2017)

MONSTAT. (2010)

MIDAS Project, World Bank. (2016)

World Bank. (2016)

Fair Observer (2017) 77

Fair Observer. (2017)

	Poverty Line.81		
	In Morocco, there has been steady decline in poverty, though the underlying factors may be remittances, deceleration of population growth and macroeconomic stability. Inequalities between rich and poor are still abounding, and poverty essentially has a rural face in the country. The MPI also reveals that an additional 12.6% of Moroccans are dangerously 'near' poverty. Among the 15.5% poor, 5% are in 'severe' multidimensional poverty.	The subjective poverty rate has increased by 15% from 2004 figures in rural Morocco. Meanwhile, the urban poverty rate is half of the national average in 2001, and in 2014, stands at one-third.83	Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.84 However, Morocco is entering a period potential demographic dividend, with the number of workingage population, relative to below 15 and above 64 years, increasing. This could either signal a potential economic boom or an unemployment crisis, if economic activity is not encouraged and made inclusive for the marginalized.85
Tunisia	24.7% below the National Poverty Line. 86 Poverty rates in Tunisia have seen a significant increase, from 15.5% (2010) to 24.7% (2018). Income disparities are high: the top 20% of Tunisians earn 46% of the national income, while the bottom 20% earn only 5.9%. 87 Civil unrest since the 2011	Rural areas in Tunisia remain marginalized and underprivileged, leading to high rates of rural to urban migration, particularly towards Greater Tunis and its agglomeration economies. ⁸⁸	25.1% female 71.3% male Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. Be Like Morocco, Tunisia faces crucial demographic transition in the coming years, yet barriers to the job market remain high. Young women are particularly vulnerable and face exclusion from economic activities.

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The lower-middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of \$3.10/day. World Bank. (2017)

World Bank. (2018)

ILO. Women in Business and Law. (2014)

This IFAD report expounds on the factors affecting employment and gender in Morocco.

[&]quot;Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

Tunisia: Economic Outlook. World Bank. (2018)

Amara, M., Jemmali, H. & Ayadi, M. "Rural-Urban Migration and Income Disparity in Tunisia". <u>Economic Research Forum.</u> (2017)

⁹ ILO. Women in Business and Law. (2014)

This <u>ILO report</u> expounds on the factors affecting employment and gender in Tunisia.

has increased poverty and unemployment and discouraged entrepreneurs and private sector actors.	
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TABLE VI: POLICY ENVIRONMENT, LEGAL TOOLS & INSTITUTIONS

This section explores the policy environment in the countries participating in the MedProgramme, and presents a potential list of gender stakeholders, relevant for the site-specific activities and collaborations during the project cycle. Legal tools, and enabling policies are crucial in ensuring gender inequality can be address through tangible and formal procedures. This table, compiled from various sources, particularly UN Women and the Equal Futures Partnership, thus, takes stock of international conventions, national laws and policies, and country-level stakeholders that can aid the MedProgramme in gender mainstreaming and narrowing socioeconomic gaps.

Country	Policy Tools, Legal Instruments, Institutions	Provisions
	1994 – CEDAW	Albania signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994.
	1998 (amended 2012) – Constitution of the Government of Albania	Article 18 establishes that all are equal before the law. No one may be unjustly discriminated against for reasons such as gender, race, religion, ethnicity, language, political, religious and philosophical beliefs.
Albania	2016 - 2020 – National Strategy and Action Plan on Gender Equality	The Strategy and the Action Plan represent a commitment for 2016 – 2020, with concrete interventions towards economic empowerment of women and men, ensuring actual participation and engagement in political and public decision-making processes; reducing gender-based violence and domestic violence and strengthening the coordination and monitoring role of the national mechanism of gender equality.
	Institutions	Ministry of Social Welfare and Youth (with contribution of the Inter-Agency Working Group) Ministry of Justice National Referral Mechanisms
	1996 – CEDAW	Algeria signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996.
Algeria	2008 – Constitution of the Government of Algeria	Under the Algerian Constitution, women enjoy the same civil and political rights as men and have the status of full citizens (Articles 29 and 31).
	Institutions	Ministry of National Solidarity, Family Affairs and Status of Women

	1993 – CEDAW	DIL : 14 L. C. 1C. C. 4 Ell : C.
	1993 – CEDAW	BiH signed the International Convention on the Elimination of All Forms of
		Discrimination against Women (CEDAW) in
		1993.
	2006 – Law on Gender	Bosnia's Gender Equality Law provides definitions for direct
	Equality	and indirect discrimination, as well as gender-based violence and sexual harassment. It mandates the creation of gender
Bosnia and Herzegovina		equality of gender equality strategies and programs in education, employment, access to resources, social protection, etc.
(BiH)	2014 - 2017 – National Action	The NAP addresses the gender rights principles laid out in
	Plan on Gender	the national law, and works towards improving women's
		participation in public life and decision-making, and particularly target the legacy of human trafficking and sexual
		slavery in the country's post-conflict context.
		7 1
	Institutions	Agency for Gender Equality of Bosnia and Herzegovina
		Ministry of Human Rights and Refugees
	1981 – CEDAW	Egypt signed the International Convention on the
	1301 – CLDAW	Elimination of All Forms of
		Discrimination against Women (CEDAW) in
		1981.
	2014 – Constitution of the	The two main legislations protecting and supporting women
	Government of Egypt 1937 – Criminal Code of the	are the Egyptian Constitution of 2014 (Articles 11, 53 and 214) and the Criminal Code of 1937. Crimes against women
	Government of Egypt	in Egypt are divided in two groups: misdemeanors and
Egypt		felonies. Misdemeanors, such as catcalling, are usually
гдурі		punished by fines with shortened trials. Felonies, like FGM and rape, are permanent criminal offences, punished by
		longer jail time.
	Integrated Gender Program	The integrated program is helping to address multi-faceted
	(UNDP, UN Women and	challenges faced by women and young girl through three
	UNFPA)	pillars of social, legal and economic empowerment. A similar EBRD project for the MENA region is active in Egypt as well.
	Institutions	National Council for Women

Lebanon	1936 – Censtitution of the Government of Lebanon Women's International League for Peace and Feminism (WILPF) – ABAAD Resource Centre of Gender Equality Institutions	Lebanon signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in1997. The Lebanese legal system is primarily based on French Civil Code and Egyptian legal systems. Whilst there is no unified civil law in Lebanon, the Lebanese Constitution promulgated in 1926 articulates the principle of equality among all citizens (Articles 7 and 12). WILPF and ABAAD are leading national consultations to develop the first National Action Plan towards gender equality currently. The EU wrapped up its 'Gender Equity and Empowerment of Women in Lebanon' in early 2017, which has laid groundwork towards the adoption of a quota system for women in the country.
	4000 CED AW/	
Libya	1989 – CEDAW 2011 - 2013 – Interim Constitutional Declaration of the Government of Libya	Libya signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1989. After the end of Gaddafi's rule, the UN-back interim government (Government of National Accord) has overseen the development of draft constitution. Women activists in Libya are currently in the process of including substantive demands ⁹¹ in the draft, which will be presented to the Libyan people for referendum. This Constitution will lay out the new framework for gender equality legal tools and policy environment in the coming years.
Montenegro	2006 – CEDAW 2007 – Law on Gender Equality 2008 – Action Plan to Achieve Gender Equality in Montenegro – PAPRR Institutions	Montenegro signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2006. The first Law on Gender Equality was adopted in July 2007. The Law on Amendments to the Law on Gender Equality was adopted in June 2015, in line with international specifications of the UN, the EU, and the Council of Europe. This document was drafted in the context of the accession of Montenegro to the EU, based on CEDAW. Action Plan is updated every 4 years, and out of the critical areas covered in Beijing Declaration, Montenegro has opted for 9. The Ministry of Human and Minority Rights The Department of Gender Equality Affairs
Morocco	1993 – CEDAW 2011 – Constitution of the Government of Morocco	Morocco signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993. Article 19 establishes that men and women should enjoy equal rights and freedoms in all civil, political, economic, social, cultural and environmental matters.

Libya Women's Demands in the Constitution (UNDP-led Cairo consultations). (2017)

	2013 – IKRAM	The Government Plan for Equality was developed by the Government of Morocco along with key stakeholders
	Institutions	The Ministry of Human Rights The Ministry of Family, Solidarity, Equality and Social Development
	1985 – CEDAW	Tunisia signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985. However, in April 2014, Tunisia officially lifted key reservations on the CEDAW.
Tunisia	2014 – Constitution of the Government of Tunisia	The new constitution adopted in January 2014 includes strong protection for women's rights: Article 21 confirms equality of rights and duties; Article 34 guarantees women's representation in all elected bodies; and, Article 46 ensures protection of human rights.
Tunisia	2015 - 2018 — Gender Equality Promotion Program in Tunisia (EU-Tunisia)	The financing agreement of the EU-Tunisia program was signed in April 2015. It aims to contribute to achieving gender equality in Tunisia by reducing inequalities at national, regional and local levels.
	Institutions	The National Council of Peers for Equality and Equal Opportunities between Women and Men Ministry of Women, Family and Children

5. The MedProgramme's Gender Approach, Target and Components

5.1 Means to an End: Transformative Gender Mainstreaming Towards Gender Equality

The conversation on gender mainstreaming to mobilize efforts on gender equality and reduction of discriminatory gender practices and social norms has gained currency as an intellectual concern, technical solution and international consensus. However, the discursive landscape of gender equality has shaped and reconfigured what gender mainstreaming could potentially achieve in different contexts, particularly— the vision of equality as sameness, which aspires to a gender-neutral world where women are treated according to the same principles, standards and norms as men, enjoying equal rights and opportunities; and, the approach of difference or reversal, which problematizes the existence of unquestioned patriarchal norms, reconstructing the political by seeking recognition of non-hegemonic gendered identities that have been treated as different in comparison to male normative identities and cultures. 92

This Gender Mainstreaming Strategy adopts the latter transformative approach ('the approach of difference or reversal'), positing a gender equality vision for the MedProgramme that questions established categories and implements positive action measures towards gender-responsive actions in the Mediterranean region. In effect, gender mainstreaming is

Verloo, M. Multiple Meanings of Gender Equality: A critical frame analysis of gender policies in Europe, p. 23. (2008)

therefore not an end (goal) of the MedProgramme- rather, a means (process) to an end. This approach reflects also the normative standards defined by the European Institute for Gender Equality (EIGE), which stipulates the importance of identifying gender mainstreaming as a process because it:

'Ensures that policy-making and legislative work is of higher quality and has a greater relevance for society, because it makes policies respond more effectively to the needs of all citizens — women and men, girls and boys. Gender mainstreaming makes public interventions more effective and ensures that inequalities are not perpetuated.

It does not only aim to avoid the creation or reinforcement of inequalities, which can have adverse effects on both women and men. It also implies analyzing the existing situation, with the purpose of identifying inequalities, and developing policies which aim to redress these inequalities, and undo the mechanisms that caused them".93

5.2 Targets and Components of the MedProgramme's Gender Strategy

Based on the above conceptual hinterland, this Strategy has identified three targets, that the eight Child Projects will address through their tailored assessments and action plans (Section 6):

a. Address gender-blind hurdles with gender-differentiated consequences.

Although formal gender equality rights and guarantees are almost ubiquitous in the Mediterranean nations, this Strategy recognizes that gender-neutral policy language may not result in gender-egalitarian outcomes, when implemented in a gendered environment, influenced by gender imbalances and biases. The neutral policies and laws, which are veritably gender-blind, often work in concert with social tenets, traditional norms, constitutional interpretations, and cultural expectations in ways that may stymie the advancement of gender-responsive practices. Thus, in tandem with country partners and implementing agencies, the MedProgramme will stipulate the analysis of potential gender-neutral hurdles in project- and site-specific contexts to develop targeted action towards addressing the gender-differentiated consequences.

BOX 1: Female entrepreneurship in Mediterranean faces gender-blind hurdles.

The World Bank reports that seemingly gender-neutral barriers such as cumbersome and costly procedures for opening a business and uncertain chances of recovering assets from a failed venture often have gender-differentiated consequences, notably deterring women's entrepreneurship in the Mediterranean region. Thus, gender-neutral laws, when implemented and interpreted in gendered contexts, often create ambiguities and unintended consequences for the disadvantaged. This also relates to legal inconsistencies and opaqueness afforded to gender-neutral policy language and laws by the fluid interpretation and precedence given to family law and measures, which are often derived from traditional sociocultural norms.

Source: The Environment for Women's Entrepreneurship in the Middle East and North Africa. The World Bank. (2008).

See Good Practices in Gender Mainstreaming, a technical guide by EIGE.

See The Environment for Women's Entrepreneurship in MENA, p. 52. The World Bank. (2008)

b. Mitigate gender-specific barriers and discriminatory norms.

Certain barriers and discriminatory norms are framed with gender-specificity, targeting one gender or more, against normative ideals that stipulate hegemonic social identities. Gender-specific barriers have tangible and invisible discriminatory outcomes, prejudices and stigma, and are often accepted, condoned and tolerated within the larger social framework. To address these barriers, attention, awareness and resources must be accorded to address the effects of the multiplicity of social differences and gender norms to usher in enduring change and assuage the gender burdens on specific demographic groups. The MedProgramme will, hence, develop dedicated project- and country-specific gender assessments and gender action plans for each of its constituent projects and from the preparation phase through to the concluding monitoring and evaluation stage of the project cycle, with objectives (relating to broader project objectives), transformative outcomes (relating to the wider focus of the project), means of verification and indicators.

BOX 2: Labor participation has gender-specific barriers in the Mediterranean.

The Union for the Mediterranean, on the occasion of its Ministerial Conference in Barcelona (2015), brought the focus on the importance of fostering women's participation in economic life and on its obstacles in the region: women's low presence in paid labor, low wages – with lower wages of 10 – 40%, and a low level of access to positions of responsibility and decision-making, These gender-specific barriers are exacerbated by the current unequal share of care, domestic and reproductive unpaid labor performed by women in the Mediterranean. Women also face discrimination, violence and legal inequalities, which impede their ability to leverage opportunities towards empowerment and independence.

Source: Visions and Actions to Promote Gender Equality in the Mediterranean. The Union for the Mediterranean. (2017).

c. Scale up gender-sensitive policies and deliver gender-responsive outcomes.

Building on the knowledge and analysis of gender-blind and gender-specific barriers, the MedProgramme will have the imperative to use consultative and participatory tools to conduct gender-differentiated beneficiary assessments and formulate gender-sensitive policies to address the same. These gender-sensitive policies will provide the basis for gender-responsive outcomes within the results framework of the different projects, by bringing transformative change towards⁹⁵: promoting equitable access to goods, services, status, and decision-making power (both within policy institutions and households); expanding the subjective and objective range of legal, social and psychological choices available to both men and women; breaking gender stereotypes, norms and patterns; and, providing the conducive environment, through capacity-building in policy institutions, governance structures and local bodies and awareness-raising among communities (particularly, male sensitization), for a pan-Mediterranean gender mainstreaming effort that is verifiable on all three accounts of accountability, transparency and incentive mechanisms.

To scale up and deliver these policies and actions, the MedProgramme will stipulate gender-budget lines within the constituent projects, as dedicated resources need to be mobilized for positive impacts on the gender gap in the region.

See *Good Practices in Gender Mainstreaming*, a technical guide by EIGE.

BOX 3: Agricultural reform requires gender-sensitive policies in the Mediterranean.

Women's contribution to agricultural labor (particularly smallholder farming) in the Mediterranean Basin is significant: providing diversified income sources to households, creating empowerment opportunities, and boosting national agricultural and economic production. However, this contribution is often underplayed and misrepresented – although women undertake the time-consuming aspects of agricultural work, they often do so without or with scarce pay. Land ownership and tenure security in the Mediterranean displays gendered disparities as well, with succession laws and social customs in effect. FAO's reform framework for agriculture in the region, as highlighted in the May 2018 *Regional Conference for the Near East*, showcases these issues through the "Promoting Food Security, Blue Growth, and Empowerment of Small-Scale Farmers and Women in the MENA region" policy document

Source: "Mediterranean Women in Rural and Agricultural Communities: Double Jeopardy, Multiple Opportunities". International Centre for Advanced Mediterranean Agronomic Studies. (2018).

5.3 Visualization of the MedProgramme's Gender Strategy

Based their justification and review of peer examples, this Strategy has identified the following components for the MedProgramme's gender targets, which reflect the types of actions that will be implemented by the Child Projects, visualized below:

Please see visual from p.14.

TARGETS AND COMPONENTS – MEDPROGRAMME GENDER STRATEGY

ADDRESS GENDER-BLIND HURDLES WITH GENDER-DIFFERENTIATED

IMPACTS

MITIGATE
GENDER-SPECIFIC
BARRIERS AND
DISCRIMINATORY
NORMS

SCALE UP GENDER-SENSITIVE POLICIES & DELIVER GENDER-RESPONSIVE OUTCOMES

ENSURE GENDER-EQUITABLE PARTICIPATION THROUGH INCENTIVES AND CONDUCIVE MILIEUS FOR THE DISADVANTAGED IDENTIFY GENDER-DISCRIMINATORY BARRIERS TO PROGRAMME OUTCOMES AND ADDRESS THEM WITHIN PROJECT RESULTS EARMARK RESOURCES (GENDER-BUDGETING) AND IMPLEMENT TAILORED AND TARGETED ACTION POINTS TO TRANSLATE GENDER RHETORIC INTO VERIFIABLE OUTCOMES

INITIATE DIALOGUE ABOUT THE IMPACTS OF GENDER-BLIND HURDLES AND HOW TO ADDRESS THEM AMONG STAKEHOLDERS PROVIDE ACCESS TO POLICY AND PLANNING TOWARDS MORE INCLUSIVE ENVIRONMENTAL GOVERNANCE, RESILIENCE STRATEGIES BUILD UP GENDERRELATED ASSETS AND
CAPACITIES (such as
LOCAL WOMEN'S
GROUPS AND THEIR
INCLUSION IN POLICY
NEGOTIATIONS AND
MANAGEMENT
STRATEGIES)

CAPACITY BUILD
TOWARDS
STRONGER ACCESS
AND ASSOCIATION
FOR WOMEN TO
ENSURE BENEFITS
FROM BENEFICIARY
NETWORKS

LIAISE WITH LOCAL AND NATIONAL STAKEHOLDERS ON REFORM ADVOCACY DEDICATE RESOURCES
TOWARDS MONITORING
AND EVALUATION OF
GENDER RESULTS,
GENDER-DISAGGREGATED
AND SOCIOECONOMIC
DATA, BEST PRACTICES
AND LESSONS LEARNT
FOR FUTURE
INTERVENTIONS

6. Operationalizing the Strategy – the MED Approach

Devising a gender mainstreaming strategy denotes only the very outset of a multi-stage policy cycle that requires consistent efforts of integration and consideration of gender perspectives, in each phase of the program and by all actors involved, to succeed.

To operationalize the Strategy, therefore, three necessary elements ($^{\circ}MED' - 5.1$) have to be present and inform the different stages of execution, even if the content changes in real time to adequately meet the necessities of project- and site-specific contexts for the different Child Projects, as described below.

Further, a map (5.2) is presented of how the MED Gender Mainstreaming approach is expected to function.

6.1 Defining the MED Approach

The approach to be used to operationalize the Strategy is defined below:

a. Multidimensional.

A multidimensional approach ensures that gender is used as a principal analytical category – however not without context or functioning in a void. Linkages between gender, poverty, environmental justice, socioeconomic inclusion, ethnic diversity and customary practices must be identified, analyzed and considered in the formulation of inclusive environmental action and policy. Child Projects, hence, will have the autonomy to identify gender issues relevant to the project objectives and outcomes (gender assessments), and devise strategic as well as appropriate gender action plans to address these.

b. Empowering

Integrating empowerment as an operational imperative ensures that program objectives and technical components are geared towards environmental and socioeconomic co-benefits. This is necessary to convert gender-aware rhetoric and gender-responsive analysis into actionable points within project logframes (logical frameworks), and with dedicated resource allocation (gender-budgeting) – which have positive ramifications for the gender status quo in project-specific contexts both nationally and locally. Child Projects, hence, will ensure gender assessments and action plans dovetail with the locale of project activities, stakeholders involved, and ensure budgetary allocations to translate rhetoric towards actions with verifiable results.

c. Durable.

Durability is the hallmark of a successful strategy/ intervention/project or program. Gender-responsive actions must ensure a shelf life beyond the duration of the project cycle, with positive uptake among national and local stakeholders. Directing investment towards institutional and technical capacity-building, and ensuring ownership of project by stakeholders, will warrant exit strategies for the different Child Projects. Particularly, it will be a program-wide imperative to generate information and data on the linkages between environmental security, climate risks and gender specifically on the Mediterranean region – while, building up capacities of national and local stakeholders to address these in a holistic manner, beyond the duration of the project cycle.

Please see the visualization of the MED approach – and what it entails for Child Projects and the overall MedProgramme below on p.36.



Figure 2: The 'MED' Approach – Child Projects and the MedProgramme

(developed by author)

6.2 Mapping the Programme-wide MED Approach with Child Projects

Having defined the guiding tenets of Program-wide gender mainstreaming to be devolved for each Child Project, the map (presented as a visual) of how this Strategy will tentatively be operationalized is presented below:

a. Preparation Phase — Child Projects identify gender priorities and actions through Gender Assessments

The MED approach of this Gender Mainstreaming Strategy for the MedProgramme will allow for considerable autonomy, as Child Projects will conduct their own gender assessments. The process of conducting a successful gender assessment includes: identifying the gender directives from the GEF focal point of the Child Project, as well UN Environment's gender priorities with regard to the Child Project thematic; desk-reviews of available literature on the theme from – gender, social development, and political risk perspectives; collating relevant data for the gender considerations from international organizations, development banks, national authorities, and think tanks (economic development-focused); structuring a potential baseline upon which the Child Project can positively impact; and finally, gathering information on relevant gender stakeholders (ministries, independent activist groups, NGOs) and legal mechanisms (gender-progressive laws) who could participate during the implementation phase.

b. Preparation Phase – Child Projects develop Gender Action Plans based on assessments

The individual gender assessments conducted by each Child Project will form the basis for the development of a tailored and strategic Gender Action Plan, which will mainstream action points to positively impact upon the gender status quo under the broader project objective, outcomes and activities, as well develop means of verification indicators to measure progress to impacts at later stages. This will ensure that Child Projects are able to cater to their specific gender priorities and issues, pertaining to country- and site-specific contexts, and address them in holistic manner through their activities. Further, such an

approach will avoid the perils of establishing a 'one-size-fits-all' approach for the MedProgramme, and allow for a nuanced and focused mainstreaming effort spanning the different Child Projects.

c. Inception and Implementation Phase – Child Projects will plan the execution of action points identified in the Action Plans

Operationalizing the Action Plans will involve meticulous planning, as well as resource allocation. As the Child Projects move into the inception phase and ground realities of project implementation take shape – the execution of the action points with dedicated gender budgeting will guarantee that the gender rhetoric moves towards practical and verifiable results within the broader project objectives and outcomes. The steady maintenance of momentum of gender mainstreaming, at this stage, is very crucial – and, will require concerted efforts from different actors within Child Projects to ensure gender stakeholders are engaged, capacity and consensus are mobilized, and resources are used to target beneficiaries to leverage both socioeconomic and environmental co-benefits.

d. Throughout the Project Cycle – Child Project 4.1

This Gender Mainstreaming Strategy, intended to structure gender-responsive activities and to provide a coherent mainstreaming methodology, will be included as one of the three pillars of the Child Project 4.1 – the support project providing also the knowledge management and coordination pillars to the entire MedProgramme. This gives the Child Project 4.1 a unique position: at once, while providing a gender support structure to the pan-MedProgramme portfolio, it will also provide a platform for 'cross-fertilization' by pooling in gender-relevant research and data (from the different Child Projects) to facilitate Programme-wide learning and exchange.

e. Reporting and Monitoring – Child Projects align gender results with indicators/develop gender-specific indicators

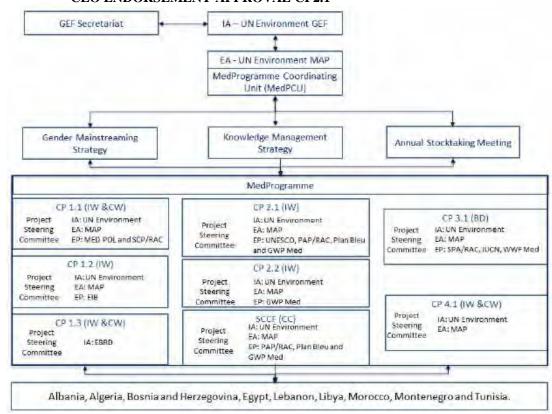
In keeping with the *durability* aspect of the MED approach – it is crucial to ensure a prolonged shelf life of the MedProgramme interventions. A step towards this begins in the inception and implementation phase by building capacity and consensus, while mobilizing adequate resources. Going into the reporting and monitoring stages, it will be important for Child Projects to measure progress to impacts against gender-specific indicators that are developed in the Gender Action Plans (in line with GEF gender indicators), to collate Programme-wide gender information and data, and report accordingly. This will also lay the ground for a potential 'extension' of the Gender Mainstreaming Strategy through future interventions – by ensuring these can benefit from the gender-responsive actions, policies and capacity building done in the region, and by expanding the entry points these new projects can take with the information and data generated towards cross-cutting issues such as poverty, water access, land and infrastructure etc.

7. Conclusion

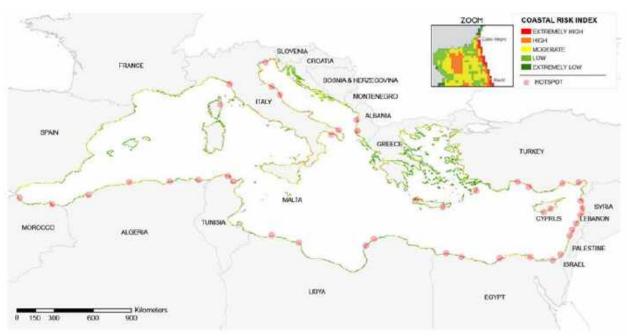
This Strategy has stipulated the MedProgramme's gender priorities, targets and components, as well as the operationalizing approach towards achieving the same. The focus has been to usher a change and/or reversal perspective and posit a gender equality vision for the MedProgramme that hopes to question established social and gendered categories and implements positive action measures towards gender-responsive actions in the MedIterranean region. In effect, gender mainstreaming is therefore not an end (goal) of the MedProgramme—rather, a means (process) to an end (greater gender equality).

With international consensus, national priorities and organizational efforts (of the GEF and UN Environment – see 1.2) prioritizing gender mainstreaming as a solution to greater stakeholder involvement, improved environmental results and social outcomes of projects, and ensure inclusivity. In this milieu, this Strategy will generate regional cooperation and contribute to the pan-Mediterranean conversation on the importance of greater gender equality for the overall progress of society, improvement of economy and functioning of a healthy polity.

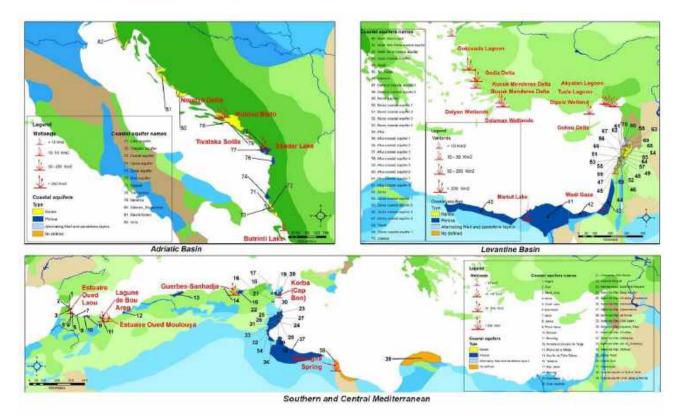
ANNE U FIGURES TA LES AND TE O ES FOR T E RE UEST FOR CEO ENDORSEMENT-APPROVAL CP2.1



Fi ure 1 MedProgramme Structure



Fi ure 2 Map of assessed coastal risk indices (based on climate-related hazards) and hotspots in the Mediterranean (MedSea Foundation and Plan Bleu, 2016)



Fi ure Location, type and name of the main coastal aquifers and representative wetlands assessed in the Adriatic, Levantine and Southern and Central Basins of the Mediterranean Sea for the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Pollution from	Pollution from other	uman De endenc	Lin s ith Ecos stems	Salini ation
Countr	Nutrients	Pollutants	for Domestic Uses	Leos stems	
AL ANIA					
Buna					
Cika					
Dukati					
Mati					
Tragiasi					
Vjosa					
ALGERIA					
Collo-Teleza					
Comp. Dunaire					
Terga					
Plaine de la					
Mitidja					
Annaba					
OSNIA AND	ER EGOVINA				
Trebisnjica					
Egypt					
North Nile					
Delta					

Aquifer	Pollution	Pollution	uman	Lin s ith	Salini ation
name	from	from other	De endenc	Ecos stems	
Countr	Nutrients	Pollutants	for Domestic		
			Uses		
North Sinai					
Northwest					
Coast					
LE ANON					
Afka					
Beirut					
Chekka					
Damour					
South					
Tripoli					
Tyr-Saida					
Zarka					
LI A					
Gefara Plain					
Montenegro	•	•		•	
Boka Bay					
Bojana					
Morocco				-	
Bou-Areg					
Rhis-Nekkor					
Martil-Alila					
Negro					
Oued laou					
Smir					
TUNISIA					
Chegarnia-Sidi					
Abicha					
Cote Orientale					
Gabes					
Grombalia					
Mahdia					
Mornag					
Ras Jebel					
Sahel Sfax					
(deep)					
Sahel Sfax					
(shallow)					
Tabarka					
Level of concern		Very Low	Low	Medium	High

Fi ure Environmental and socioeconomic indicators of the current state of Mediterranean coastal aquifers and indications of the associated level of concern (UN Environment/MAP and UNESCO-IHP, 2015)

Countr		Ground ater		Ecos stem Ser ices Status				
	Related Coastal Ecos stems		Fishin	Ar	iculture	ater Purification	Cultural Ser ices Education	
Albania	Butrinti							
Algeria	Guerbes							
BiH	Hutovo Bla	to						
Egypt	Lake Mariu	ıt						
Lebanon	Tyre Beach							
Libya	Tawurgha S	Spring						
Montenegro/	Skadarsko l	Lake						
Albania	Tivatska Sc	olila						
Morocco	Bou Areg I	agune						
	Estuaire Mo	oulouya						
	Estuaire Ou	ied Laou						
Tunisia	Cap Bon							
Status trend	High	Moderate	Lov	v stable	Low decreasing	NA	Unknown	
color coding								

Fi ure Status and trends of ecosystem services provided by Mediterranean groundwater-related wetlands
(UN Environment/MAP and UNESCO-IHP, 2015)



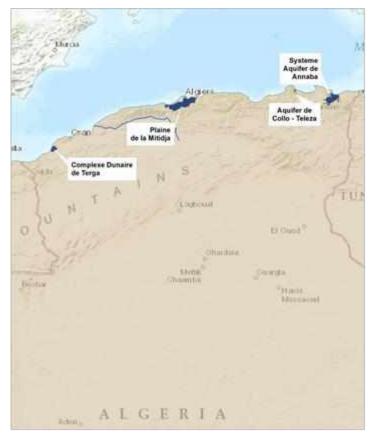
Fi ure 6 Main coastal aquifers in Albania (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Buna aquifer					
Cika aquifer					
Dukati aquifer					
Mati aquifer					
Tragjasi aquifer					
Vjosa aquifer					

	very low	Low	Medium	High	
Level of concern					
Fi ure 7 Findings of the analysis of the main coastal aquifers in Albania undertaken in the MedPartnership (UN					
Environment/MAP and UNESCO-IHP, 2015)					

ater olicies and s	trate ies			
Main rinci les	National Strategy for Development and Integration 2014-2020:			
and o jecti es	Managing rivers by basin			
	Creating an electronic water cadaster			
	Integrated management of transboundary waters			
	Fully transposing the water-related EU acquis into national legislation			
	Establishing a data collection system for marine habitants, etc.			
Consideration of	None			
round ater and				
of coastal aquifers				
	ain rinci les measures)			
ater o nershi	Law No. 111/2012, dated 15 December 2012, "On Integrated			
	Management of Water Resources":			
	All water resources are state property			
Ground ater	Law No. 111/2012, dated 15 December 2012, "On Integrated			
consideration	Management of Water Resources" provides for protection of			
	groundwater and the implementation of plans for improving its status			
	Law No. 10431, dated 9 June 2011, "On Environmental Protection"			
	provides for water protection:			
	1. Ensuring the prevention of damage to surface and groundwater quality			
	2. Improving the quality of surface waste waters waste and achieving water			
	quality objectives			
	3. Rehabilitating contaminated groundwater			
	4. Improving the balance between the abstraction and the natural recharge of			
	groundwater 5. Protection of aquatic flora and fauna			
	5. Trotection of aquatic flora and fauna			
	Law No. 8102, dated 28 March 1996 (amended with the law No. 9352,			
	dated 3 March 2005; Law No.9584, dated 17 July 2006 and the Law			
	No.9915, dated 12 May 2008), "On sector regulatory framework for			
	water supply and disposal, and the treatment of wastewater ":			
	 Establishes a regulatory framework for an independent regulatory 			
	authority responsible for water resources, water supply and disposal of			
	wastewater processing, including surface water and groundwater resources			
	F-11-1-0,			
	Law No. 9663, dated 18 December 2006, "On Concessions" regulates			
	the procedures for granting concessions for use of natural resources,			
	including water resources (surface water and groundwater) for			
	hydropower; for the production, distribution and management of water			
	for irrigation, drainage; and for the cleaning of canals and dams.			
	101 1115411011, Graniage, and 101 the electring of earlies and daths.			

Fi ure 8 Overview of policy and legal aspects of water management in Albania (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure 9 Main coastal aquifers in Al eria (UN En ironment MAP and UNESCO I P 2 1)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Aquifère de Collo - Teleza					
Complexe Dunaire de Terga					
Plaine de la Mitidja					
Système Aquifère de Annaba					
Level of concern	Very low	Low	Medium	High	

Fi ure 1 Findings of the analysis of the main coastal aquifers in algeria undertaken in the Medpartnership (UN Environment/MAP and UNESCO-IHP, 2015)

National olic and	strate for ater				
Princi les and	The main principles of the water policy are:				
o jecti es	1. Saving water through controlling leakage and water waste				
, and the second	2. Creating awareness about the rational utilization of water				
	3. Protecting water from all pollution				
	4. Universality: water is the business of all users				
	5. Research and evaluation of surface water and groundwater resources				
	It aims to:				
	• Increase the mobilization of the resource				
	• Rehabilitate and develop the infrastructures (drinking water and sanitation)				
	Modernize and extend the irrigated surfaces to support the strategy for food security				
	Ensure good water governance and improve management indicators				
Consideration of	None				
round ater and					
coastal aquifers					
-	nain rinci les and ro isions)				
ater o nershi	Water belongs to the public domain (Water law no. 05-12, 4 August				
	2005)				
Consideration of	Law no. 05-12				
round ater	Executive decree no. 10-23 of 2010 on the quantitative protection of				
	groundwater				
	Executive decree no. 10-25 of 2010, establishing the granting				
	modalities of a concession for establishing water pumping installations				

	(surface and groundwater) in view of ensuring an autonomous supply of industrial zones or units. Executive decree no. 10-317 of 2010 defining the conditions for the samples and the analyses of ground and surface water resources. Executive decree no. 10-318 of 2010 defining the granting modalities for concessions for using water resources from fossil or slowly
Consideration of	renewable aquifer systems Executive decree no. 11-219 of 2011 defining the quality objectives of surface and groundwater for drinking purposes. None
coastal aquifers	

Fi ure 11 Overview of policy and legal aspects of water management in Algeria (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure 12 Main coastal aquifer in BiH (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Trebišnjica					

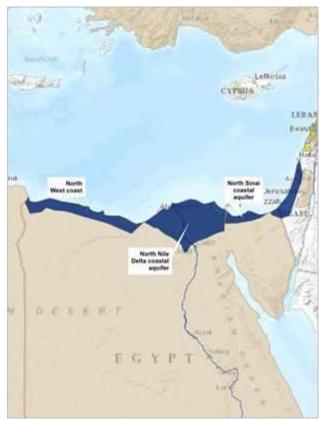
Level of Very low Low Medium High concern

Fi ure 1 Findings of the analysis of the main coastal aquifer in BiH undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

otom olision and	tuata ias					
ater olicies and s						
Main rinci les	The Development Strategy of FBiH (2010-2020) identifies water and					
and o jecti es	groundwater as development factors:					
	Strategic goals of the strategy:					
	Legal and institutional reform of the water sector,					
	 Integrating water management into the economic system, 					
	Safeguarding the good status of surface and groundwater					
	Harmonization with EU acquis					
	Water Management Strategy (FBiH) (2011) for the period 2010-2022					
	includes strategic objectives related to groundwater:					
	Strategic objective no. 1: legal reform of the water sector and alignment					
	with the European union water acquis;					
	Strategic objective no. 8: achieving and maintaining good status of					
	surface water and groundwater to protect of aquatic flora and fauna,					
	and needs of water users					
	Framework Plan of Development of Water Management (2006) of RS					
	refers to groundwater in a number of objectives:					
	Ensuring the implementation of the EU Water Framework Directive					
	Defining limits of substances for surface and groundwater in protected					
	areas					
	Program establishing monitoring of nitrates in surface water and					
	groundwater					
	Adopting measures for preventing water contamination and protection					
	in case of outflow in groundwater and surface water.					
	in that of outlier in ground hater and surface hater					
	Strategy of Integral water management of RS for the period 2014 –					
	2024; this is a draft version. Adopted on the basis of the Framework					
	Plan. Special emphasis on waste water treatment plants.					
Consideration of	In all strategic and planning documents					
round ater	in an strategic and planning documents					
	Join winei leg and massyres)					
	Main rinci les and measures)					
ater o nershi	FBiH:					
	Category I waters: FBiH is the owner					
	• Category II waters: the city or the municipality is the owner unless					
	regulated otherwise by the Cantonal regulations					

Ground ater	FBiH:
consideration	• Water Law (2006)
	• RS:
	• Water Law (2006, amended in 2009)
	BDBiH:
	 Water Law (2004, amended in 2005 and 2007)
Coastal aquifers	None
consideration	

Fi ure 1 Overview of policy and legal aspects of water management in BiH



Fi ure 1 Main coastal aquifers in Egypt (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
North Nile Delta coastal aquifer					
North Sinai coastal aquifer					
North West coast					
Level of concern	Very low	Low	Medium	High	

Fi ure 16 Findings of the analysis of the main coastal aquifers in Egypt undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

ater olicies and s	trate ies			
ater olicies and s Main rinci les and o jecti es	The national water policy (until 2017) rests on three major pillars: 1. Increasing water use efficiency 2. Water quality protection 3. Pollution control and water supply augmentation The National Water Resources Plan Project developed water resources management and investment plans, including for groundwater resources. Its implementation depends on: 1. Development of additional water resources; 2. More efficient use of the available water resources; 3. Improvement of water quality to protect public health and the environment.			
Consideration of round ater and	The Strategy of water resources development and management in Egypt until 2050 considers major issues of concern such as scarcity of water, pollution control, securing water quality and water saving, industrial and agricultural waste disposal, protection of groundwater resources, and environmental problems of climate change. Groundwater management is one of the key issues in this strategy. Strategy of water resources development and management			
of coastal aquifers				
	nain rinci les and measures)			
ater o nershi	No information available			
Ground ater consideration Coastal aquifers	Groundwater is recognized in Law No. 48/1982 (Article 1-C) and its supplementary Decree 8/1983 (Article 1-11) as one of the categories of the water bodies in the country None			
consideration	T TOTAL			

Fi ure 17 Overview of policy and legal aspects of water management in Egypt (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure 18 Main coastal aquifers in Lebanon (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Afka					
Beirut					
Chekka					
Damour					
South					
Tripoli					
Tyr-Saida					
Zarka					

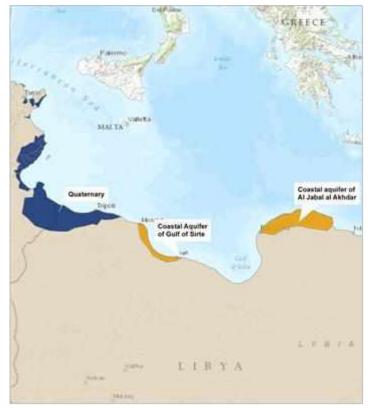
	Very low	Low	Medium	High
Level of concern				

Fi ure 19 Findings of the analysis of the main coastal aquifers in Lebanon undertaken in the MedPartnership (UNEnvironment/MAP and UNESCO-IHP, 2015)

**	T .	- 1		1		•
W	ater	nol	icies	and	ctrat	egies

Main rinci les	The National Water Sector Strategy (2010-2018) is composed of three
and o jecti es	documents:
and o jetti es	1. Baseline for the Strategy (September 2010)
	2. Forecasts for water supply and demand (November 2010)
	3. Investment plan for the period 2011-2015 (December 2010), with four
	pillars:
	i. Institutional reforms as defined by Law no. 221/2000, amended
	by Law no. 241 (of 7 August 2000) and Law no. 377 (14 December 2001).
	/
	ii. Improve the financial performance of the sector: participation of
	the private sector, and establishment of more rational tariffs.
	iii. Adopt the water law and develop the legal framework for the
	national Strategy iv. Include environmental concerns in the water sector such as
	protection of the water resources and of the recharge zones.
	The implementation of the National Strategy is compromised by the
	political situation in Lebanon.
Consideration of	The plan recognizes the need of a global approach with elements of
round ater and	Integrated Water Resources Management (IWRM).
of coastal aquifers	Lebanon ratified the ICZM Protocol (decree No. 639 dated 18/9/2014).
Legal framework (Ma	nin principles and measures)
ater o nershi	Water (including groundwater) is a public property with the exception
	of the acquired rights (Order n°144/S 1925)
Ground ater	Decree n°14438 (2 May 1970) organizing the exploration and use of
consideration	groundwater.
	Ministerial order n°118 (13 September 2010) defines the administrative
	procedure for the permits.
Coastal aquifers	The ICZM Protocol ratified (Decree No. 639 dated 18/9/2014).
consideration	
L	l .

Fi ure 2 Overview of policy and legal aspects of water management in Lebanon (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure 21 Main coastal aquifers in Libya (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
North West Libya (Jafara Plain)					
Level of	Very low	Low	Medium	High	I

Fi ure 22 Findings of the analysis of the main coastal aquifers in Libya undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

ater olicies and s	trate ies ater resources strate 2 2 2
Main rinci les	Objectives:
and o jecti es	Reduce the deficit in the water budget
	Prevent water quality deterioration
	Strategy components: • Minimize the water budget deficit • Develop conventional and non-conventional water resources • Protect water resources from pollution • Recover the costs of providing water • Develop human and institutional capacities

	Improve and strengthen water legislation
	Promote technical cooperation in the fields of water resources management
Consideration of	Groundwater represents 95% of total water use in Libya. It occurs in
round ater and	renewable coastal aquifers in the north and in large non-renewable
of coastal aquifers	aquifers in the southern and central basins. In 2006, extraction from
_	coastal aquifers amounted to 1,673 Mm ³ or 34% of total groundwater
	extraction. The strategy therefore emphasizes the importance of the
	protection of the coastal aquifers by reducing their water budget deficit
	through inter-basin water transfer from the south and development of
	non-conventional resources such as desalination and treated
	wastewater.
Le al frame or (M	Tain rinci les and measures)
ater o nershi	Water is a public ownership (Law No. 3 of 1982 Water Code)
	r x 332
Ground ater	Law No. 3 of 1982 Water Code
consideration	
Coastal aquifers	Decree No. 791 for the year 1982:
consideration	• Covering additional water demand for existing or new projects within the
	Jafara Plain and the western coastal belt by extracting additional water from
	the first aquifer is prohibited
	Drilling new or substitute water wells in the Jafara Plain is prohibited
	The Benghazi plain area is put under "restricted water use" and drilling new
	production wells in the northern part of the Benghazi plain is prohibited
	• The first aquifer in the area between Khoms and Misurata is put under
	absolute ban for additional groundwater abstraction
	• The El-Marj Plain area is put under "absolute ban" for additional
	groundwater abstraction
	Seawater intrusion (coastal aquifers) is given a special attention in
	Article 41 of the environmental protection law which pointed the
	cautious use of aquifers to ensure no intrusion of seawater or water
	from other formations of higher salinity or lower quality.
	Augists 4 of Desiries No. 701 of 1002
	Article 4 of Decision No. 791 of 1982 necessitates the application of
	collective irrigation in areas experiencing water shortages as a result of
	continuing decline of the water table in the first aquifer, as well as in
	areas with signs of seawater intrusion.
	Auticle 5 on the recordations for demostic materials it the materials
	Article 5 on the regulations for domestic water exploitation states that:
	1. It is not allowed to pump additional groundwater in excess of current rates
	to cover domestic use for coastal cities all along the coastline.
	2. Necessary measures must be taken to assess the current and future demand for domestic water use in coastal cities through the establishment of
	desalination plants.

Article 6 on the regulations for industrial water exploitation states that water requirements of industrial projects shall be met through seawater desalination or from deep aquifers either directly or after treatment, if necessary.

Fi ure 2 Overview of policy and legal aspects of water management in Libya (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure 2 Main coastal aquifers in Montenegro (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name Boka bay	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
aquifer Bojana aquifer					
Level of concern	Very low	Low	Medium	High	

Fi ure 2 Findings of the analysis of the main coastal aquifers in Montenegro undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

ater olicies and strate ies

Main rinci les and o jecti es

The Water Basis (2001) contains the description of the status of water and water management facilities according to individual areas, the conditions for maintenance and development of water resources to ensure the most advantageous and the most expedient technical, economic and environmental solutions for uniform water management, protection from adverse effects of water, protection of waters against pollution and the water use.

The Strategy for water management of Montenegro (2017) sets the basis for the water sector reforms which will be implemented in order fulfill the necessary standards in water management, including organizational adjustments and systemic strengthening of professional and institutional capacities at the national and local level. Strategic commitments and goals set in this document constitute the basis for the development of water management plans. At the same time, it sets the frameworks that must be respected in the development of strategies and plans for spatial planning, environmental protection and other areas that are water-dependent or produce impacts on water.

The National Strategy for Sustainable Development until 2030 (NSSD 2030) adopted in 2016 fully integrated the UN 2030 Agenda for Sustainable Development. The NSSD offers an answer to unsustainable development trends (e.g., use of mineral resources, forests, water, space, human resources, ...); institutional framework that does not comply with the requirements for the implementation of the policy of sustainable development and the requirements of a good governance and the noncompliance of real actions with the expressed political support and official commitments. It defines guidelines for aligning the conflicting sectoral policies both among themselves and with the NSSD, as well as with environmental policy. It also incorporated the Action Plan of the National Strategy for ICZM.

The National Strategy for Integrated Coastal Zone Management (NS ICZM, adopted in 2015):

- Contains a special part related to water, covering all waters including groundwater;
- Identifies key issues, challenges and strategic goals for integrated coastal zone management;
- Comprises a set of operational objectives for each goal, with measures, activities, indicators and partnerships for implementation.

Consideration of round ater and of coastal aquifers

The Water Basis provides description of all groundwater sources, per water basin, capacities of individual groundwater source, as well as their usage, pollution prevention and protection measures. The overall

	assessment of the state of groundwater shows that ecological status is good. Main sources of pollution are communal waste waters, industrial waste waters, usage of fertilizers and intrusion of saline waters in coastal area.
Le al frame or (M	Iain rinci les and measures)
ater o nershi	Water is State property (article 6 Water Law).
Ground ater	Groundwater is considered under the Water Law.
consideration	
Coastal aquifers	The Law on Public Maritime Domain includes in the Public Maritime
consideration	Domain submarine springs and wells on the shore (article 2) (Official
	Gazette of the Republic of Montenegro, No. 14/92).

Fi ure 26 Overview of policy and legal aspects of water management in Montenegro (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure 27 Main coastal aquifers in Morocco (UN Environment/MAP and UNESCO-IHP, 2015)

Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
	Nutrients		Other for Domestic	Other for Domestic Lin s ith

	Very low	Low	Medium	High
Level of concern				

Fi ure 28 Findings of the analysis of the main coastal aquifers in Morocco undertaken in the MedPartnership

(UN Environment/MAP and UNESCO-IHP, 2015)

4 1	
ater olicies ar	
	for the ater sector (ado ted in 2 9 – currentl ein re ised and
extended)	
Main rinci les	The three pillars of the national strategy for water are:
and o jecti es	 Demand management and enhancing the value of water: more efficient use and water savings in all sectors (drinking water, irrigation, industrial and touristic water) The management and development of water supply: Mobilization of conventional water resources: construction of large and small dams, and interbasin water transfers Mobilization of non-conventional water resources: desalination of seawater, demineralization of brackish groundwater, reuse of treated wastewater and collection of rainwater Preservation and protection of water resources, natural habitats and fragile zones: Preservation of groundwater resources: governance model, reinforcement of control systems on groundwater abstractions, establishment of protection banning perimeters, and development of artificial recharge of aquifers Protection of the quality of water resources: sanitation plans and treatment of wastewater, national program of prevention and combatting industrial pollution, implementation of the national plan of the management of domestic and assimilated wastes Conservation of hydrographic basins, oasis and wetlands; protection of springs, program of protection of wetlands and natural lakes, fight against desertification, protection of the coastline
	It also establishes accompanying measures, especially: • the modernization of information systems and reinforcement of means and
	competences
	Continuation of legal and institutional reforms
	Tariff and financing systems

Consideration	Groundwater is considered as a precious and strategic resource for the					
of round ater	upply of domestic water to be preserved and used in the frame of a rational					
and coastal	and integrated management which will guaranty its equilibrium and					
aquifers	sustainability for future generations.					
The le al frame	or (rinci les and ro isions)					
ater	All water resources are part of the public domain (Water Law no. 10-95 of					
o nershi	1995)					
Consideration	Groundwaters are ruled by the Water Law (10-95 of 1995)					
of round ater						
Consideration	None					
of coastal						
aquifers						

Fi ure 29 Overview of policy and legal aspects of water management in Morocco (UN Environment/MAP and UNESCO-IHP, 2015)



Fi ure Main coastal aquifers in Tunisia (UN Environment/MAP and UNESCO-IHP, 2015)

Aquifer name	Nutrients	Other Pollutants	De endenc for Domestic Uses	Lin s ith Ecos stems	Salini ation
Chegarnia-Sidi					
Abicha-Oued El					
Khairat					
Côte orientale					
Gabes Shallow					
Grombalia					

Mahdia-Ksour					
Essaf-Sidi					
Alouane					
Mornag					
Ras Jebel					
Sahel de Sfax					
Deep					
Sahel de Sfax					
Shallow					
Tabarka					
Level of	Very low	Low	Medium	High	
concern					

Fi ure 1 Findings of the analysis of the main coastal aquifers in Tunisia undertaken in the MedPartnership (UN Environment/MAP and UNESCO-IHP, 2015)

Water policies and strategies:					
The National Strategy for	or the Protection of Groundwaters (2010-2014)				
Main rinci les and o jecti es					
Consideration of	The strategy deals with groundwater.				
round ater and					
coastal aquifers					
The legal framework (pr	rinciples and provisions)				
Water ownership	Water is part of the public domain (Water code).				
_	The Tunisian constitution guaranties the right to water (article 44)				
Consideration of	Groundwaters are considered by the Water Code				
groundwater					
Consideration of	None				
coastal aquifers					

Fi ure 2 Overview of policy and legal aspects of water management in Tunisia (UN Environment/MAP and UNESCO-IHP, 2015)

	Adriatic coun	tries	
Le al frame or	Al ania	i	Montene ro
Water ownership	State	State	State
Groundwater consideration	Under Water Law(s)	Under Water Law(s)	Under Water Law(s)
Specific provisions for coastal aquifers	No	No	Law on Public Maritime Domain covers submarine springs and near-shore wells
Basin management	Yes	Yes	Yes
Planning instruments	IWRM	Water management strategy	Water management strategy, ICZM Strategy
Regulations on groundwater abstractions	Yes	Yes	Yes, except for "general"** uses
Regulations on groundwater quality	Yes	Yes	Yes
Sanitary protection zones (wells, springs, aquifers)		Yes	Yes
Ratification of ICZM Protocol	Yes		Yes

Fi ure Legal aspects: summary of main findings on present conditions (Adriatic countries)

^{*} For households, bathing and recreation, from first aquifer.

** i.e. without use of any equipment or construction information provided by country. GW, groundwater. Grey cells: no information provided by countries; white cells: yes; orange cells: no.

	Southern and Eastern Mediterranean countries						
	Al eria	E t	Le anon	Li a	Morocco	Tunisia	
Le al frame or							
Water ownership	State	No information	State	State	State	State	
Groundwater	Under Water	Under Water		Under Water	Under Water	Under Water	
consideration	Law(s)	Law(s)		Law(s)	Law(s)	Law(s)	
Specific provisions for coastal aquifers	No	No	No	Prohibition (Decree 791/1982) of any new GW abstraction in coastal aquifers	No	No	
Basin management	Yes			Yes	Yes		
Planning instruments	Executive Decree		National Water Strategy		National Water Plan		
Regulations on groundwater abstractions	Yes	Yes ***	Yes	Yes	Yes	Yes	
Regulations on groundwater quality		Yes	Yes	Yes	Yes	Yes	
Sanitary protection zones (wells, springs, aquifers)	Yes				Yes	Yes	
Ratification of ICZM Protocol		Yes	Yes		Yes		

Fi ure Legal aspects: summary of main findings on present conditions (Southern and Eastern Mediterranean countries)

^{***} Permission required for drilling water wells and installing pumps. Grey cells: no information provided by countries; white cells: yes; orange cells: no.

Long Term Expected Impacts: The coastal populations along the Southern and Eastern Mediterranean shores benefit from improved health conditions, more stable livelihoods, and enhanced resilience to climatic change and variability.



Intermediate State: Countries independently engage in implementing integrated coastal zone and aquifer management plans. Cooperation agencies and IFIs adopt and mainstream approaches and solutions promoted by the Program.

Assumptions:

- Countries, convinced of the concrete effectiveness of Project's approaches and of the environmental and social benefits to be derived from them commit to implementation of relevant plans, reforms and investments.
- Mitigation mechanisms of risks related to social instability, migratory fluxes and extreme climatic events in the project sites prove to be effective.

Drivers:

- Recognition by countries of the need to manage and protect coastal freshwater resources and related ecosystems.
- Binding commitments reached at the global and regional levels.
- Well established transboundary cooperation frameworks. Regional cooperation providing incentives and support structure.

Outcome: The momentum and the critical mass of interventions needed to trigger and sustain countries' action in coastal zone integrated land and water management created



Outputs: (In selected hotspots and priority areas)

Coherent regional framework characterized by the systematic application of the ICZM principles enshrined in the Barcelona Convention Protocol: Integration within the ICZM context of critical freshwater resources (groundwater) so far neglected and threatened by irreversible loss.

Environmental stress reduction and improved climate resilience through strategic intersectoral coordination and innovation. Broader adoption of fully integrated coastal zone and water resources management policies and practices.

Fi ure Child Project 2.1 Theory of Change: From outcomes to impacts



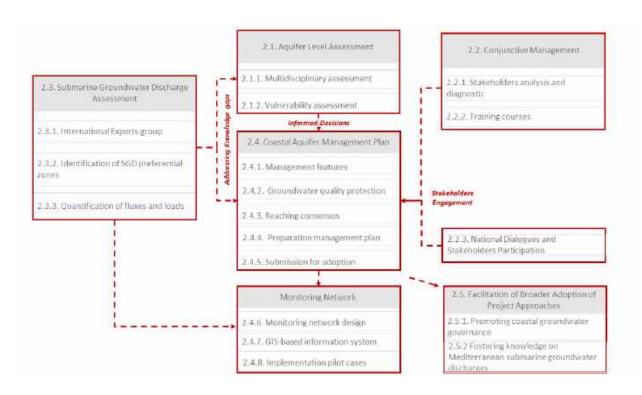
Fi ure 6 Mean overall baseline of progress across the target countries of Child Project 2.1, with respect to integrated coastal management and integrated coastal and watershed management



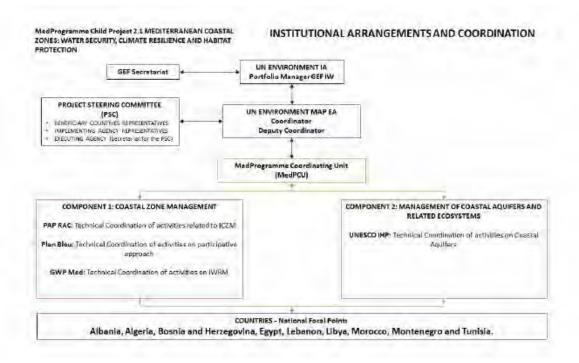
Fi ure 7 ICZM PROCESS & CLIMAGINE



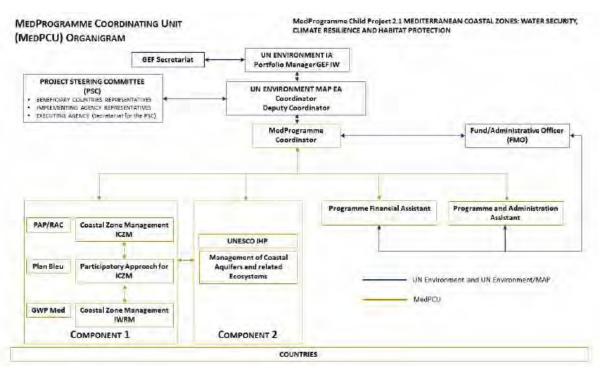
Fi ure 8 Location of the five priority aquifers for Component 2 of Child Project 2.1 (UNESCO-IHP 2015)



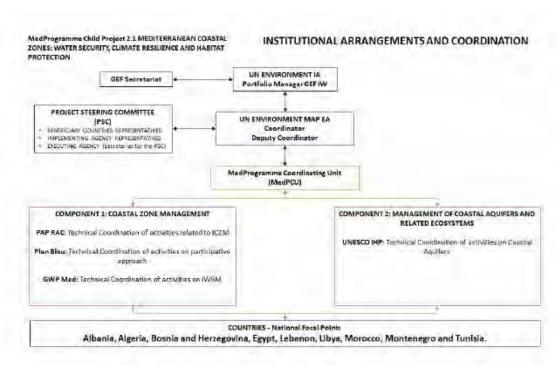
Fi ure 9 Schematic overview of the interactions between the activities of Component 2



Fi ure Institutional Arrangements and Coordination of Child Project 2.1



Fi ure 1 Organigram of the MedProgramme Coordinating Unit



Fi ure Institutional Arrangements and Coordination of Child Project 2.1

Ta le 1 MedProgramme Components, Child Projects and GEF Focal Areas

Mediterranean Sea Pro ramme (MedPro ramme)			
MedPro ramme Com onent	Child Project	GEF Focal Areas	
1. Reduction of Land Based	1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts"	IW and CW	
Pollution in Priority Coastal Hotspots, and measuring progress to impacts.	1.2 "Mediterranean Pollution Hot Spots Investment Project"	IW	
to impacts.	1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"	IW and CW	
	2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"	IW	
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone.	2.2 "Mediterranean Coastal Zones: Managing the Water- Food-Energy and Ecosystem NEXUS"	IW	
	SCCF "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas"	CC	
3. Protecting Marine Biodiversity	3.1 "Management Support and Expansion of Marine Protected Areas in Libya"	BD	
4. Knowledge Management and Programme Coordination	4.1 "Mediterranean Sea Large Marine Ecosystem Environment and Climate Regional Support Project"	IW and CW	

Ta le 2 Mediterranean Sea Large Marine Ecosystem (LME) - Transboundary Diagnostic Analysis

Major En ironmental Concerns	Statement of the causes	Main Issues of Transboundary Concern
Decline of iodi ersit	Pollution (sewage, oil, nutrients, etc.), invasive species, introduced species, land reclamation, river damming and flow modification, over-fishing, by-catch, and adverse effects of fishing gear and uses on marine habitats (e.g. bottom trawling), solid waste disposal at sea, uncontrolled tourist presence in ecologically sensitive areas, as well as inadequate public and stakeholder awareness, and inadequate or non-existent legislation and available	Land Based Pollution Degradation and Conversion of Critical Habitats: Sea Grass Meadows; Coastal Wetlands and Lagoons. Overexploitation of Marine Living resources Alien Species Introduction
Decline in Sea ater ualit	enforcement means. Land based sources of marine pollution, both point and non-point, determine increasing trends in eutrophication and its related oxygen deficiency and bloom of nuisance species; presence of hot spots of pollution (125 identified by TDA) leading to decline in overall water quality, loss of coastal habitats and biodiversity, and human health	Land Based Pollution: (i) point sources (excess nutrients, toxics and persistent toxic substances). (ii) non-point sources (mostly nutrients from agriculture, and sediments). Anthropogenic Pressures on Coastal Zones
uman ealth Ris s	problems. Pollutants that degrade the ecosystem also present risks to human health, including heavy metals, organochlorines, pesticides, hydrocarbons, and the like, but also microbial and viral pollution. In addition, the response of the ecosystem to stress may induce toxicity, such as toxic dinoflagellates that arise from eutrophic conditions in some instances. This may affect human health in the region. Primary pathways for human health risks include ingestion of water or seafood products, contact with contaminated seawater (or in some cases beaches), and perhaps contact with contaminated sea food (for marine	Land Based Pollution Anthropogenic Pressures on Coastal Zones

De radation and	Growing population and unregulated	
loss of coastal	coastal development interfere with	Anthropogenic pressure on Coastal
fresh ater	coastal processes, cause groundwater	Zones
resources and of	salinization, and degradation of	
coastal ecos stem	coastal ecosystems	
ser ices.		

Ta le : Existing mechanisms for Interministerial Coordination

	Existin antici ated mechanisms for Interministerial Coordination		
Countr	Coastal zone management	Water resources management	
Albania	MAP System National Focal Points	IHP National Committee	
Algeria	IMC for ICZM established in the MedPartnership	IHP National Committee	
Bosnia and Herzegovina	Child Project 2.1 will support the launch of IMC for ICZM	None	
Egypt	National Steering Committee for ICZM	IHP National Committee	
Lebanon	Child Project 2.1 will support the launch of IMC for ICZM	IHP National Committee	
Libya	None	IHP National Committee	
Montenegro	IMC for ICZM established in the MedPartnership	None	
Morocco	National Commission for Integrated Coastal Management	IHP National Committee	
Tunisia	Child Project 2.1 will support the launch of IMC for ICZM	IHP National Committee	

Ta le Summary of Expected Project Achievements

O jecti es	Tar ets	Out uts
Strengthening and	At least 12,500,000 hectares	1 ICZM National Strategy submitted for adoption (Egypt)
expansion of	of coastal landscapes and	
Integrated Coastal	seascapes under improved	1 ICZM National Strategy and 1 Integrated Management
Zone	management	Plan including consideration of IWRM and coastal
Management in the Mediterranean		groundwater (IMF approach) submitted for adoption (Lebanon: Damour)
		(Levalion: Damour)
region		2 ICZM Plans submitted for adoption (Morocco: Tanger-
		Tétouan- Al Hoceima Area and in Montenegro: Boka
		Kotorska Bay area [Boka Bay])
	ICZM Protocol ratification	Proposals for Inter-ministerial approaches discussed with the
	process under way in three additional countries	relevant authorities in four project countries
	40010101141 400114145	3 Sub-regional (Adriatic, Southern and Eastern
		Mediterranean) trainings in support of ICZM Protocol
		implementation
		5 national consultations in support of ICZM Protocol
		ratification
	Reinforced awareness and	MedOpen course linked with other similar courses dealing
	capacity of countries in the	with integrated approaches
	implementation of	

	comprehensive ICZM policies and practices	Yearly advanced virtual training course during the project implementation period 300 stakeholders trained on ICZM, Maritime Spatial Planning (MSP) and Climate Variability and Change (CVC) adaptation New promotional materials developed for awareness campaigns on yearly basis during the project implementation period
Improving sustainability of services provided by coastal aquifers and by groundwater- related coastal habitats	Five high priority coastal aquifers and related ecosystems under improved conjunctive surface and groundwater management	 1000 persons attend or exposed to awareness raising events Management Plans produced for 5 priority coastal aquifers, and submitted for adoption by local/national governance entities: Albania and Montenegro – Buna-Bojana transboundary coastal aquifer Egypt – North West coastal aquifer Lebanon – Damour coastal aquifer Morocco – Rhiss-Nekkor coastal aquifer Tunisia – Ras Jebel coastal aquifer Monitoring networks and protocols designed and field tested and trainings conducted for all 5 priority aquifers.
	Submarine Groundwater Discharges Assessments	Completed for all project countries
	Reinforced awareness and capacity of countries in the implementation of conjunctive surface and groundwater management	3 Sub-regional (Adriatic, and South, Central and Levantine Basins) conjunctive surface and groundwater management stakeholders' training modules implemented 5 National Dialogues to identify potential conjunctive management solutions

ox 1 An Integrative Management Framework (IMF) for land, river basin and aquifer management in the coastal zone

The IMF was developed within the GEF UNEP/MAP MedPartnership project as a tool to promote integrated approaches for implementation of the SAPs and NAPs. The IMF and its operational guidelines – produced by GWP-Med, PAP/RAC and UNESCO-IHP – are intended to:

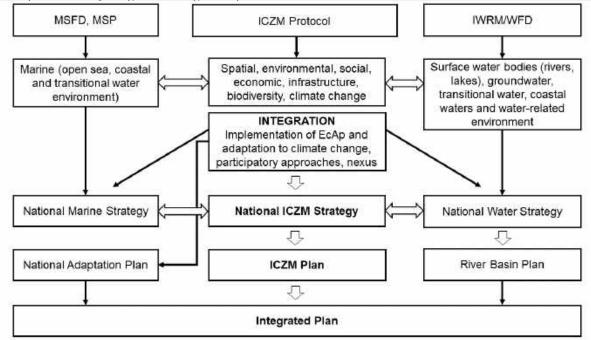
- identify possibilities and solutions for converging coastal, river basin, aquifer and groundwater management, considering also the implementation of the ecosystem approach;
- integrate climate change considerations as cross-cutting issues throughout the planning and implementation processes in coastal zones;
- support an active involvement of stakeholders and of the general public in the planning and management of coastal zones.



(a) The coastal zone showing the ICZM Protocol boundaries, groundwaters and waters defined by the Water Framework Directive (WFD) (Credit: Brian Shipman, PAP/RAC)

The IMF identifies the key sectoral and spatial dimensions within which intergration must be

defined and sets out the methodology to achieve this. The methodology was applied to the development of ICZM plans in three coastal areas in the MedPartnership, to demonstrate the simultaneous consideration of marine spatial planning, ICZM, integrated water resources management and climate change adaptation in the development of truly integrated management plans for Mediterranean coastal areas.



(b) Convergence of policy tools, strategies and plans for the development of an integrated plan as defined in the IMF.

Box2: MedProgramme Child Project 2.1: Synopsis of Activities in Project Countries Albania

National activities		
Coastal Zone	 National assessment to support implementation of the ICZM Protocol 	
Management	 Coast Day central celebration dedicated to coastal aquifers 	
Management of Coastal Aquifers and Related Ecosystems	Preparation of the Priority Actions Plan for the Buna-Bojana Transboundary Coastal Aquifer	
Regional activities	National Assessment of Submarine Groundwater Discharges	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events 	
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management	
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform 	
	Participation in IW:LEARN events	

ALGERIA

	ALGERIA
National activities	
Coastal Zone Management	 National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol Coast Day central celebration
Management of Coastal Aquifers and Related Ecosystems Regional activities	National Assessment of Submarine Groundwater Discharges
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

BOSNIA AND HERZEGOVINA

National activities	
Coastal Zone Management	National consultation to support the launch of an Inter-Ministerial Committee
Management of Coastal Aquifers and Related Ecosystems Regional activities	National Assessment of Submarine Groundwater Discharges
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

EGYPT

	EGYPT
National activities	
Coastal Zone Management	 Preparation of Egypt's National ICZM Strategy, applying the Climagine participatory approach National assessment to support ratification of the ICZM Protocol Stakeholder consultation to support ratification of the ICZM Protocol
Management of Coastal Aquifers and Related Ecosystems Regional activities	 Preparation of the Management Plan for the North West Coast Aquifer National Assessment of Submarine Groundwater Discharges
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

LEBANON

	LEBANON
National activities	
Coastal Zone Management	 Preparation of Lebanon's National ICZM Strategy, applying the Climagine participatory approach Preparation of the Integrated Management Plan for the Damour Region, applying the Integrative Methodological Framework developed under the MedPartnership, and the Climagine participatory approach National assessment to support implementation of the ICZM Protocol Stakeholder consultation to support implementation of the ICZM Protocol National consultation to support the launch of an Inter-Ministerial Committee
Management of Coastal Aquifers and Related Ecosystems	 Preparation of the Management Plan for the Damour Coastal Aquifer National Assessment of Submarine Groundwater Discharges
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

STATE OF LIBYA

National activities	
Coastal Zone	None
Management	
Management of	 National Assessment of Submarine Groundwater Discharges
Coastal Aquifers and	
Related Ecosystems	
Regional activities	
Coastal Zone	 Participation in the sub-regional training in support of ICZM Protocol implementation
Management	 Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast
	 Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis
	Participation in annual Coast Day events
Management of	Joint regional training modules on conjunctive surface and groundwater management
Coastal Aquifers and	
Related Ecosystems	
Program-wide	Sharing of best practices as contribution to MedProgramme-wide Knowledge
communication and	Management Strategy
knowledge	Contribution of data and active use of the MedProgramme Knowledge Management
management	Platform
· ·	Participation in IW LEARN events

Montenegro

		MONTENEORO
National activities		
Coastal Zone Management	•	Preparation of an ICZM Plan for the Boka Kotorska Bay area (Boka Bay) (applying the Climagine participatory approach) in synergy with the SCCF Project activity, which will
		mainstream climate change adaptation into this plan

Management of Coastal Aquifers and Related Ecosystems Regional activities	 Preparation of the Priority Actions Plan for the Buna - Bojana Transboundary Coastal Aquifer National Assessment of Submarine Groundwater Discharges 	
Coastal Zone Management	Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events	
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management	
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events 	

Morocco

National activities	
Coastal Zone Management	 Preparation of an ICZM Plan for the Tanger-Tétouan-Al Hoceima Region (applying the Climagine participatory approach) in synergy with the SCCF Project activity, which will mainstream climate change adaptation into this plan National assessment to support implementation of the ICZM Protocol Stakeholder consultation to support implementation of the ICZM Protocol Coast Day central celebration dedicated to coastal resilience
Management of Coastal Aquifers and Related Ecosystems	 Preparation of the Management Plan for the Ras Jebel Coastal Aquifer National Assessment of Submarine Groundwater Discharges
Regional activities	
Coastal Zone Management	 Participation in the sub-regional training in support of ICZM Protocol implementation Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis Participation in annual Coast Day events
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management
Program-wide communication and knowledge management	 Sharing of best practices as contribution to MedProgramme-wide Knowledge Management Strategy Contribution of data and active use of the MedProgramme Knowledge Management Platform Participation in IW:LEARN events

TUNISIA

National activities				
Coastal Zone	National assessment to support ratification of the ICZM Protocol			
Management	Stakeholder consultation to support ratification of the ICZM Protocol			
	National consultation to support the launch of an Inter-Ministerial Committee			
Management of	 Preparation of the Management Plan for the Rhiss-Nekkor Coastal Aquifer 			
Coastal Aquifers and	 National Assessment of Submarine Groundwater Discharges 			
Related Ecosystems	<u> </u>			
Regional activities				
Coastal Zone	 Participation in the sub-regional training in support of ICZM Protocol implementation 			
Management	 Identification of gaps regarding coastal observation, to feed into a regional conceptual framework for coastal observation to monitor progress towards achievement of good environmental status of the coast 			
	 Access to and support for the MedOpen online training modules on ICZM, adaptation to climate change, building coastal resilience, marine spatial planning, and land use change analysis 			
	Participation in annual Coast Day events			
Management of Coastal Aquifers and Related Ecosystems	Joint regional training modules on conjunctive surface and groundwater management			
Program-wide	Sharing of best practices as contribution to MedProgramme-wide Knowledge			
communication and	Management Strategy			
knowledge	 Contribution of data and active use of the MedProgramme Knowledge Management 			
management	Platform			
	Participation in IW:LEARN events			

Ta le Contribution of Child Project 2.1 to the SDGs

of
2.1
5,6, 6.a, 6. b
a
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Ta le 6 Typologies of stakeholders for Child Project 2.1

T e	Exam les	General roles res onsi ilities in the
of		roject
or ani ation		
National governments	Ministries responsible for: Food Securit (Fisheries Aquaculture A riculture Forestr) En ironment Sustaina le De elo ment Tourism Finance and Plannin Forei n Affairs Ener and Minin Meteorolo ical Ser ices Coast Guards; Statistics;	Overall: National o ernments should address trans oundar issues In execution of s ecific roles and res onsi ilities national o ernment a encies should de elo and im lement mechanisms to facilitate artici ation of sta eholders in the roject and related ro rammes and rojects Specific: De elo enforce monitor and e aluate olicies related to the shared marine coastal resources (e ministries res onsi le for en ironment fisheries finance forei n affairs tourism) Lead or artici ate in de elo ment and im lementation of national and re ional ro rammes rojects and initiati es aimed at reducin ha itat de radation ollution and unsustaina le fresh ater a stractions. Act as focal oints of the roject res onsi le for im lementation at the national le el Collect mana e anal e and share information rele ant to the o ernance of the shared coastal marine s ace
National and regional private sector companies and associations National and	Re ional and national ri ate sector associations (e otel and Tourism Association national cham ers of commerce) Indi idual lar e and medium si ed com anies (e fishin com anies hotels restaurants oil and as com anies shi in com anies an s insurance com anies) Small and micro enter rises and their associations (e fishers and national fisherfol or ani ations tour o erators and associations) Research institutes for round ater	 O erall Di erse rou ith aried and often com etin interests roles and res onsi ilities (e oil com anies are e sta eholders in ollution and ha itat de radation issues rather than in unsustaina le fishin hile ater utilities are e sta eholders in addressin all trans oundar issues) S ecific Pro ide and collect data and information on different as ects of the shared coastal marine s ace and the factors affectin it Assist in im lementation of the olicies and a lication of est ractices to ensure that recommended en ironmental safet and other standards and re ulations are ein met Some ri ate sector rou s directl in ol ed in decision ma in on the different trans oundar Assist in de elo ment of olicies re ulations and lans related to the marine en ironment Conduct research and collect mana e anal e
regional academia and research institutes	resources marine iolo climate chan e science	 and share information on the trans oundar issues and climate chan e Pro ide technical anal sis and ad ice to national o ernments on olic im lications of research Assist in technical re ie and e aluation of olicies at the re ional and national le els
National and regional media	State s onsored tele ision or radio outlets	Assist in de elo in a areness a out the alue of the coastal marine ecos stems and the ser ices that the ro ide

T e	Exam les	General roles res onsi ilities in the			
of		roject			
or ani ation					
	Re ional ne s a encies or journalists' associations	 Share information rele ant to addressin the trans oundar issues in the shared marine s ace Act as inde endent atchdo and in esti ate and communicate e issues to u lic 			

Γa le 7 Key stakeholders for the Child Project 2.1			
Outcomes and Out uts	e sta eholders and artners (and role)	Other rele ant sta eholders	
Outcome 1 Coastal zone sustainability in beneficiary countries enhanced through the expanded compliance with the ICZM Protocol and the adoption of national ICZM strategies, coastal plans and instruments, and improved gender equality. Out ut 1.1 Multi-stakeholders' consultations on ICZM Protocol ratification and implementation. Out ut 1.2 Inter-Ministerial Coordination mechanisms for coastal management in place. Out ut 1. ICZM Strategies/plans developed and adopted. Out ut 1. A series of training events in ICZM, MSP and CVC adaptation developed and implemented. Out ut 1. Raised awareness on the approaches promoted by the project.	UN Environment/MAP (Executing agency [EA]) For the activities on ICZM: PAP/RAC (Executing partner [EP]) Plan Bleu (EP) For the Integrated Management Plan of the Damour area foreseen under Output 1.3: PAP/RAC (EP) Plan Bleu (EP) GWP-Med (EP) UNESCO-IHP (EP)	Al ania Ministry of Tourism and Environment National Coastal Agency National Environmental Agency National Agency of Protected Areas Water Resources Management Agency Ministry of Urban Development Albanian Geological Survey University of Tirana INCA Al eria Ministry of Environment and Renewable Energy National Commissariat of the Littoral Ministry of Water Resources Ministry of Housing, Land-Use Planning and City National Institute of Cartography and Remote Sensing National Observatory of the Environment and the Sustainable Development National Agency for Climate Change National Office of Statistics General Directorate of Forests National School of Marine and Coastal Sciences (ENSSMAL) osnia and er e o ina Ministry of Environment and Tourism Environmental Protection Department of the Ministry of Foreign Trade and Economic Relations Federal Ministry of Environment and Herzegovina, Herzegovina-Neretva Canton Federal Ministry of Environment and Tourism Federal Ministry of Environment	

- Ministry of Foreign Trade and Economic Relations
- Federal Ministry of Agriculture, Water Management and Forestry
- Federal Institute for Hydrometeorology
- Federal Statistics Institute
- Adriatic Basin Water District Agency
- Municipality of Neum

E

- Central Department of Coastal, Marine Areas and Lakes of the Egyptian Environmental Affairs Agency (EEAA)
- National Steering Committee for ICZM
- General Organization for Physical Planning, Ministry of Housing
- Shore Protection Authority (SPA), Ministry of Water Resources and Irrigation
- Coastal Research Institute (CoRI), Water Research Center, Ministry of Water Resources and Irrigation
- National Council for Climate Change
- Coastal Governorates
- UNDP Egypt
- Friends of Environment and Development Association Egypt

Le anon

- Ministry of Environment
- Ministry of Energy and Water
- Ministry of Public Works and Transport
- Directorate General of Urban Planning
- Directorate General of Land and Maritime Transport
- Directorate General of Administrative and Local Councils
- Coastal Brigade Command and the Coastal Detachments
- Ministry of Agriculture
- Order of Engineers and Architects
- Syndicate of Hotel Owners in Lebanon
- Cooperatives of Fishermen

Li a

- Environment General Authority
- General Water Authority
- Ministry of Housing and Utilities
- Ministry of Local Government

		Montono vo
		Montene roPublic Enterprise for Coastal Zone
		Management Management
		Directorate for Climate Change and
		Med. Affairs
		Directorate for Spatial Planning
		National Council for Sustainable Payalapment CC and ICZM
		Development, CC and ICZMMunicipality of Kotor
		Municipality of Tivat
		Municipality of Herceg Novi
		Ministry of Transport and Maritime
		Affairs
		NGO ExpeditioNGO Green Net
		NGO Green NetNational Tourism Organization
		- Ivational Tourism Organization
		Morocco
		State Secretariat in charge of
		Sustainable Development of the
		Ministry of Energy, Mining and Sustainable Development
		 State Secretariat in charge of Water,
		Ministry of Equipment, Transport,
		Logistics, and Water
		Ministry of National & Urban Planning Hamilton Police Planning
		Planning, Housing and Urban PolicyMinistry for Agriculture, Maritime
		Fisheries, Rural Development,
		Water and Forests
		National Commission for Integrated Coastal Management
		Regional Council of Tangiers- Tétouan-Al Hoceima
		Port Authority of Tangiers-Med
		ONEM (National Observatory of Environment)
		• Foundation Mohamed V for
		Environment Protection
		Tunisia
		• Agence de Protection et
		d'Aménagement du Littoral (APAL)
		Ministry of Environment and
		Sustainable DevelopmentMinistry of Equipment, Housing and
		Territorial Development
		The Tunisian Association of Climate
		Change and Sustainable
		DevelopmentAcademic institutions and Research
		Centers Centers
		Ministry of Local Affairs and
		Environment
		National Agency for the Protection of the Environment
		of the Environment
Outcome 2	UN Environment/MAP (EA)	Al ania
	UNESCO-IHP (EP)	

Increased resilience to climatic variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater-related coastal habitats.

Out ut 2.1

Detailed assessments of the current state of priority coastal aquifers and related coastal ecosystems, vulnerability maps and recommendations for land use planning.

Out ut 2.2

National Dialogues identifying potential conjunctive management solutions, including stakeholders' training modules designed and implemented.

Out ut 2.

National Assessments of Submarine Groundwater Discharges and of Marine – Freshwater Interactions.

Out ut 2.

Priority aquifers coastal management plans produced including design and field testing of aquifer monitoring multipurpose networks and protocols.

Out ut 2.

Facilitation of broader adoption of approaches promoted by the project.

- Ministry of Tourism and Environment
- Agency for the Management of Water Resources
- Water Resources Management Agency (formerly Technical Secretariat of National Water Council)
- Albanian Geological Survey
- Academic institutions and Research Centres

Al eria

- Urban Agency in charge of the Protection and Promotion of the Littoral and tourist areas of the wilaya of Algiers
- National Commissariat of the Littoral
- National Institute of Cartography and Remote Sensing
- National Office of Statistics
- Ministry of Water Resources

osnia and er e o ina

- Federal Geological Survey Bosnia and Herzegovina
- Federal Ministry of Agriculture, Water Management and Forestry
- Federal Ministry of Energy, Mining and Industry
- Federal Institute for Hydrometeorology of Bosnia and Herzegovina
- Federal Statistics Institute Statistics Institute
- Ministry of Agriculture, Forestry and Water Management of Republic of Srpska
- Karst Management Centre in Trebinje

E t

- Coastal Zone Management
 Department of the Egyptian
 Environmental Affairs Agency
 (EEAA)
- Ministry of Water Resources and Irrigation
- Central Department for the Integrated Management of Coastal zones
- Central Laboratory for Environmental Quality Monitoring (CLEQM - UNESCO C2C)

Le anon

- Ministry of Energy and Water
- Academic institutions and Research Centres

Li :

General Water Authority

Montene ro

- Pu lic enter rise for Coastal one mana ement
- Directorate of a ter mana ement
- Geolo ical Sur e of Montene ro

Morocco

- Secrétariat d'État chargé de l'Eau auprès du Ministère de de l'Equipement, du Transport, de la Logistique et de l'Eau (State Secretariat in charge of Water, Ministry of Equipment, Transport, Logistics, and Water)
- State Secretariat in charge of Sustainable Development of the Ministry of Energy, Mining and Sustainable Development
- Regional Consultation Commission for the Littoral
- OREDD (Observatoires régionaux de l'environnement et du développement durable - Regional Observatories for the Environment and Sustainable Development)
- CNESTEN (Centre national de l'énergie, des sciences, et des techniques nucléaires)
- National commission for integrated management of the littoral
- High commission of Water, Forests and Combating Desertification
- Regional Council of Tangiers-Tétouan-Al Hoceima

Tunisia

- Public enterprise for Coastal zone management
- Directorate of Water management
- Geological Survey of Montenegro
- Agence de Protection et d'Aménagement du Littoral (APAL)
- Ministry of Agriculture, Hydraulic Resources and Fisheries
- Office of Planning and Hydraulic Balance

	•	General Directorate of Water
		Resources
	•	Office of Inventory and Hydraulic
		Research
	•	General Directorate of Rural
		Engineering and Water Use
	•	Directorate of Urban Hydraulics
	•	National Office of Sanitation

Ta le 8 Risks for Child Project 2.1

Ris	Le el of ris	Miti ation measures
Lack of Political Support	Low	This risk is unlikely to materialize given that Child Project 2.1 design is the result of extended consultations with all beneficiary countries and responds to their stated priorities. The project moreover foresees joint execution teams for all activities, with external experts guiding and facilitating the work of national experts and government officials and representatives, who will be in charge in all major decision points.
Political instability	High	As stated in the MedProgramme Framework Document, "some southern and eastern Mediterranean countries are going through a period of political volatility and social unrest that might negatively affect the Program's full implementation". In view of this, Child Project 2.1 will be implemented only in those countries were conditions are considered stable and/or rapidly improving. It has to be fully appreciated that the deteriorated social conditions and migratory fluxes caused by economic, environmental, or political factors affecting parts of the coastal regions object of the project, call for urgent support from the international community, support of which the project represents a meaningful signal.
Climate Change and Variability	Moderate	Future climatic scenarios indicate the Mediterranean region as one of the most affected by climate change and variability, whose signs are already being felt particularly in the Southern and Eastern Mediterranean. Improving the resilience of coastal populations and ecosystems to climatic impacts – increased frequency, duration and intensity of droughts, sea level rise, increased evaporation – is in fact a key objective of the MedProgramme, and of Child Project 2.1 in particular. It is not expected that climate change will have an impact on the Child Projects execution. Nevertheless, climate change might be contributing to the instability of the region and to the migratory fluxes. Therefore, the project's Steering

		Committee will have the authority to adopt contingency measures including changes in project activities and sites, to manage the potential adverse effects of unanticipated events.
Scarce coordination and synergies between the two project Components	Low	The project design revolves around only two major components: one, under the responsibility of PAP/RAC, dealing with the implementation of ICZM planning; the other, under the responsibility of UNESCO, dealing with coastal aquifers and groundwater governance. While cooperation and complementarities have been built in a number of project activities in both Components, there might remain some risk of poor communication and overlaps. To avoid this, the execution arrangements of the project establish ad hoc mechanisms for dialogue and joint decision making involving both executing agencies and country representatives.

Ta le 9 Detailes of the budget allocated for the MedPCU

MedProgramme Coordinating Unit (MedPCU)		Budget Allocated for the MedPCU US\$		Total US\$
	GEF Grants	PMC ¹	Technical Tasks ²	PMC+Technical Tasks
Child Project 1.1 (GEF ID 9684) ³	14,250,000	677,000	760,000	1,437,000
Child Project1.2 (GEF ID 9717)	5,000,000	90,000	-	90,000
Child Project 2.1 (GEF ID 9687)	7,000,000	333,000	90,000	423,000
Child Project 2.2 (GEF ID 9685)	3,500,000	166,000	84,000	250,000
Child Project 3.1 (GEF ID 10158)	1,376,147	65,500	58,500	124,000
Child Project 4.1 (GEF ID 9686)	2,500,000	119,000	95,000	214,000
SCCF Project (GEF ID 9670)	1,000,000	80,000	5,000	85,000
Total GEF Grants	33,626,147	1,530,500	1,092,500	2,623,000
Staffing costs as %:		5%	3%	8%

^{1:} Including travel costs of the MedPCU's staff.

Ta le 1 Deliverables and costing of the MedPCU technical support

Position Titles	\$ / Person Month, Est Person Month	Tasks to Be Performed / Deliverables	Related workplan activity			
		PCU Technical su ort				
International aters						
P MedPro ramme Coordinator	17,900 / 5	 Oversees the technical execution and develop technical products for Child Projects 2.1 Directs the organization of the MedProgramme's Annual Stocktaking Meetings, ensuring that the technical contribution of Child Project 2.1 is enriching the meeting as well as aligned with the other Child Projects of the Programme. Directs review of relevant documents and reports; identifies priorities, problems and issues to be addressed and proposes corrective actions; liaises with relevant parties; identifies and initiates follow-up actions. Directs the preparation of Child Project 2.1's specific technical documents for the organization of the MedProgramme's Annual Stocktaking Meetings, ensuring that they are organized in a coordinated manner to efficiently serve the Contracting Parties, implementing agencies, executing agencies and stakeholders. Directs review of relevant Child Project 2.1's specific technical documents and reports; identifies priorities, problems and issues to be addressed and proposes corrective actions; liaises with relevant parties; identifies and initiates follow-up actions. Supports for the implementation / ratification of the ICZM Protocol Contributes to national consultations in support of ICZM Protocol ratification 	Cross-cutting (all Child Project 2.1 workplan activities)			

^{2:} Details of the technical tasks executed by the MedPCU's staff are provided under the sections A.6 og the GEF CEO Endorsement Request Template and in Annexes E (Annex O for CP1.1 - 9684), of each child project submission package.

^{3:} Breakdown of the 760,000 allocated for Techcnial Tasks: 485,000 US\$ from CW grants for the Programme Officer CW and 275,000 US\$ from IW grants for the technical support on TDA of the Med POL Officer.

Contributes to the establishment or enhancement of Inter-Ministerial Coordination (IMC) frameworks.
Contributes to National Dialogues identifying
potential conjunctive management solutions.
Contributes to the producing materials for
awareness raising campaigns for Child Project 2.1
Participates in dissemination and awareness raising
activities at the regional and global levels
campaigns for Child Project 2.1