



United Nations Environment Programme

**Mid-Term Evaluation of the
UNEP GEF Project:
Project for Ecosystem Services (ProEcoServ)**

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Executive Summary

Background

The Project for Ecosystem Services (ProEcoServ) is a four year project with a total budget of around USD26 million. UNEP/DEPI are acting both as the Implementing and the Executing Agency and the project thus falls within the special category of UNEP's 'internally executed' GEF projects.

The project is being piloted in five countries – Chile, South Africa / Lesotho, Trinidad and Tobago and Vietnam. The national Executing Agencies are: the Institute of Advanced Studies on Arid Zones (CEAZA) in Chile, the Council for Scientific and Industrial Research (CSIR) in South Africa/ Lesotho, the University of the West Indies (UWI) in Trinidad and Tobago in collaboration with The Cropper Foundation (TCF), and, the Institute for Strategy and Policy on Natural Resources and the Environment (ISPONRE) in Vietnam.

In line with the UNEP Evaluation Policy and the UNEP Evaluation Manual, this **Mid Term Evaluation** (MTE) has been undertaken half way through project implementation to analyse whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions may be required.

The MTE has the following primary purposes:

- to provide evidence of results to date and of the likelihood of outcomes and impact in the future;
- to meet accountability requirements;
- to identify the challenges and risks to achievement of the project objectives and derive corrective actions needed for the project to achieve maximum impact and sustainability.

ProEcoServ is viewed as a flagship project focussed on mainstreaming ecosystem services (ES) into development policy. It builds on the Millennium Ecosystem Assessment (MA), its sub-global assessments (SGA) and the ongoing MA-follow-up process. ProEcoServ aims to go beyond the science of the MA, developing evidence on the how ecosystem services impact welfare and economies, and using this to influence key sector planning frameworks and macro-economic planning models. The key contribution of ProEcoServ is therefore demonstrating successful processes for the uptake of ecosystem assessment policy tools by decision makers.

The Table below provides an overview of the work being undertaken in the pilot countries. It can be seen from the Table that there is a lot of heterogeneity across the countries in terms of ecosystems being studied (grass and dryland, forests (terrestrial and mangrove) and marine ecosystems) and the scale at which the analysis is being executed (ranging from site specific, catchment, provincial to national scale). This should provide a good range of examples of how mainstreaming can work at different scales, for different ES, and in different institutional context. This was the intention of the project, which was designed such that Individual countries would develop specific sets of activities that took into account the particularities of their national institutional and policy framework as well as their ecosystems. The countries also differ in terms of their levels of awareness and capacity in Ecosystem Services at the outset of the project and in terms of data availability.

Table: Summary of work in pilot countries

Country	Pilot sites / scale	Key ES	Tools	Mainstreaming (policy, plan, process)
Chile	San Pedro de Atacama Drylands / Desert (Municipality)	Water Tourism	Water Balance Model InVest	EIA Land Use Planning Regional Plan of development (?) Local Plan of development (San Pedro) (?)
South Africa	National level	Water, drought mitigation, grazing, erosion control	Ecosystem service maps Communications	Water Policy Resource Strategy National Development Plan
	Eden district (District)	Flood / fire control , storm surge – Disaster management	Decision support system	Disaster Management plan / National Disaster Management Act
	Olifants catchment (Catchment)	Water (quality / quantity)	Tool of compiled data on ecotoxicology & water quality	Water resource classification
Trinidad & Tobago	National Level	All	Ecosystem Services introduced in SEA	National Spatial Development Strategy
	Nariva swamp - Trinidad (Site specific)	Pollination, Carbon	Exclusion studies InVest (Valuation Scenario analysis) Carbon Model	<i>Need to be specified</i> Links to local livelihoods Spatial planning Agricultural policy?
	Eastern Northern Range, Caura and Maracas Valley - Trinidad Forest (Site specific)	Soil retention, Water purification	RUSLE Valuation	Hillside Regulation (development) Policy PES? Interest in damage cost of flooding?
	South West Tobago – Coral reefs, mangroves, seagrasses (Site specific)	Shoreline protection	Mapping & Modeling using InVest and alternative model Scenario Analysis Valuation	Marine spatial planning
Vietnam	Ca Mau province mangroves (Provincial)	Coastal protection Carbon storage	InVest Valuation & Scenario analysis	Land use planning <i>Need to be specified & developed with local stakeholders</i>

Overview of Mid Term Evaluation

The project has been evaluated against eleven criteria as it is standard for all GEF projects. A summary of the ratings for the project against the evaluation criteria is provided in the Table below. Overall the project is rated as Satisfactory.

ProEcoServ is a highly relevant and important project, which has generated a lot of Government interest and support in the pilot countries and internationally. The national Executing Agencies comprise highly qualified professional who demonstrate a high level of commitment and enthusiasm for the project. ProEcoServ has already been successful in integrating ecosystem services into key national level documents in Chile, South Africa, Trinidad and Tobago and Vietnam. However, this is a complex project attempting to understand mainstreaming process across a broad range of ecosystem scales and institutional arrangements. Success of the project is contingent of the delivery of a large number of activities, and is underpinned by the availability of data, successful tool development (related to complex environmental processes) and the ability to influence decision makers and diverse stakeholder groups.

The project is now at an important point in its project cycle, with just eighteen months left it is vital that the project focuses on the key activities that will lead to successful mainstreaming. These are considered to be: Chile – the mainstreaming of the Water Balance and Tourism Models in San Pedro de Atacama; South Africa – mainstreaming of the disaster risk work in Eden, the water resource classification work in the Olifants Catchment, and the national bio-physical maps; Trinidad and Tobago - the integration of ES and SEA into the national Physical Development Plan, the scoping of a PES schemes and setting the foundation for Green National Accounts; Vietnam – the integration of ecosystem services into land use management, with a focus on mangrove ES.

Table: Summary of Ratings

Criterion	Summary Assessment	Rating
A. Attainment of project objectives and results		S
1. Effectiveness	ProEcoServ has already met some of its targets in terms of the integration of ES in official documents. To meet its other outcomes e.g. under component 1 there is a target that ‘at least 2 decision making bodies per pilot integrate information and tools indecision making’ a closer working relationship with decision makers over the next 18 months will be required in most cases.	S
2. Relevance	ProEcoServ is highly consistent with UNEP’s mandate. Ecosystem management is one of UNEP’s six priority areas. There is strong complementarity with other UNEP projects, and a strong focus on sub regional global issues and stakeholder priorities	HS

Criterion	Summary Assessment	Rating
3. Efficiency	<p>ProEcoServ builds on the SGA in the pilot countries and was carefully designed to build on existing institutions involved in SA / ES management and existing projects.</p> <p>Delays to project start up and a long lead time for some countries to fully understand how to undertaken the project activities, has contributed to the project being behind schedule.</p>	S
B. Sustainability of project outcomes		ML
1. Financial	Additional financial resources may be required to sustain the project outcomes and it is not clear where this will come from, except in the case of Trinidad and Tobago and the Green Fund. This could be given more thought over the next 18 months	ML
2. Socio-political	<p>ML in Vietnam and Chile where ownership of targeted users of the decisions tools is currently low.</p> <p>L in South Africa & Trinidad and Tobago</p>	ML - L
3. Institutional framework	<p>High level of commitment from key Government focal points in all countries.</p> <p>In most countries high level strategies providing a foundation for a green economy and sustainable ecosystem management are in place. Chile is an exception to this.</p>	L
4. Environmental	<i>Not rated</i>	-
C. Catalytic role	Can only be properly assessed on completion of the decision support tools, but ProEcoServ has attracted project champions in most countries. Not enough emphasis has been placed on possible replication of the mainstreaming processes to date.	MS
D. Stakeholders involvement	Stakeholder consultation has been extensive in South Africa and Trinidad and Tobago. In Trinidad and Tobago the engagement could be more focused on the mainstreaming objective, In Chile and Vietnam more engagement is needed to successfully communicate the project to key stakeholders.	MS
E. Country ownership / drivenness	In all the pilot countries central Government agencies are fully behind PoEcoServ and wish to be more involved going forward. However ownership needs to be strengthened at the provincial level, especially in Chile and Vietnam, where such ownership is important	S

Criterion	Summary Assessment	Rating
	to the project's success.	
F. Achievement of outputs and activities	Project delivery is behind schedule across the countries due to delays at start up. However, the project is largely getting on track. At mid term 35% compared to the planned 51% of activities have been completed.	MS
G. Preparation and readiness	A lot of effort was put into project design, but the complexity of the project and the 'newness' of the subject area meant the activities and Logical Framework have been quite hard for countries to fully understand	S
H. Implementation approach	This complex project requires strong project management – communication & co-ordination could be improved across the project, as well peer review and the effectiveness of steering committees	MS
I. Financial planning and management	Proper financial standards are being adhered to. However delays to the project have led to under disbursement of funds and co-financing as reported is significantly below the planned level.	MS
J. Monitoring and Evaluation		MS
1. M&E Design	The Project Document details the Logical Framework and M&E implementation arrangements	S
2. M&E Plan Implementation	Progress reports are generally on time and of a good standard. A review of the country specific Logical Frameworks is currently underway to ensure the framework accurately reflects work priorities and country specific SMART indicators are in place	MS
3. Budgeting and funding for M&E activities	Budget allocations for the pilot countries for M&E activities are unclear.	MS
K. UNEP Supervision and backstopping	No concerns or problems have arisen. However, internally executed projects are most at risk of encountering difficulties when a project is underperforming and/or conflicts between parties arise, which is not the experience with ProEcoServ to date.	S
Overall rating		Satisfactory

Lessons Learned

Some of the key lessons that have emerged from the MTE are:

- A ‘Mainstreaming’ project is very different to a conventional project. Right from the beginning it is necessary to interact with Government to ensure that the technical work is demand driven and policy makers are on board. Influencing decisions does not just depend on producing convincing science and economics it is also about access, influence and relationships. The outcomes of a process are also often unpredictable. Research institutions have to work hard to build relationships with decision makers and be in a position to influence decisions.
- The starting point for design of the technical tools is a clear view on what the research and technical tools will be used for, and what steps need to be taken to influence policies. This requires knowledge of the fiscal & planning cycle so that outputs are provided in a timely manner. Social scientists should be involved in mainstreaming projects to provide a deep understanding of the decision making process at specific study sites.
- While senior decision makers need to have an understanding of the approaches and results, to have confidence in the project outputs, such high level officials are liable to change following elections. Therefore in order to ensure continuity in the project’s outputs technical staff should be trained in the use of the tools.
- Working with local / indigenous communities is challenging and requires a strong presence and time commitment in order to build relationship and trust and to be successful in explaining new and complex issues. Such consideration should be reflected in budget allocations at the design stage and take priority over reports where budgets are limited.

Recommendations

The key recommendations of the MTE, applicable across the pilot countries, are:

- **Developing a diversity of tools:** There are different layers to decision making that can be informed by a variety of decision making tools (e.g. physical and economic). It is important that the project tests a variety of decision support tools to build up an understanding of their contributions and limitations and of how they can inform each other / be linked with other decision making approaches (tools). Such an approach is supported by the heterogeneity across the pilot countries, not just in terms of scale and ecosystem focus but also in terms of the capacity and expertise of the assembled teams. The focus and scope of the work of the pilot countries needs to be very clear over the next 18 months based who is in the best position to deliver specific tools.
- **Road map linking science to policy.** The main focus for the next 18 months should be making sure that mainstreaming is successful. This starts with being clear on what the policy goal is. It is recommended that each project sets out its road map for linking the science (decision support tools) with targeted policies. This road map needs to be linked to a timeline, so that all members of the project teams are clear on how activities are linked / feed into each other and when deliverables are needed by. This will help clarify what the realistic deliverables will be for each of the countries, and the risks involved. This should be drafted by the pilot countries, with support from UNEP. This exercise could be supported by the development of flow diagrams capturing the logic of mainstreaming process, which can be used as a communications as well as a management tool.
- **Documentation of mainstreaming process / information for replication.** To date there has been no holistic documentation of the mainstreaming processes being adopted by the pilot countries, and it is important that this is captured by the project to facilitate learning and to help identify replication opportunities. This should be drafted by pilot countries, with support from UNEP. A workshop within the next 6 months to start thinking about the successes and

failures of the different tools as mainstreaming instruments could be a useful way to consolidate the evidence on the diverse tools being developed across the project.

- **Peer review.** A peer review process / strategy needs to be urgently developed for the project. This strategy should include guidelines / expectations for the peer view process (e.g. the different levels of peer review (internal / external, local / international) and the types of outputs / reports they should be applied to. Given the large number of project documents it is not possible to have all documents peer reviewed at the global level (although all documents should be internally reviewed by the country teams). However a panel of peer reviewers needs to be established at the global project level to review key technical report, perhaps drawing on the global Steering Committee. Peer review will lend credibility to the project's outputs, important to the Governments of the pilot countries and others who may want to replicate the tools and processes.
- **Technical support.**
 - Additional technical support has been requested through the MTE process in a number of cases including economics, trade off and scenario analysis, Strategic Environmental Assessment (SEA), Payment for Ecosystem Services (PES). The Global Project management team should consider how this can be best supported and budgeted.
 - Economic valuation of ecosystem services is at an early stage of implementation across the countries, and could benefit from closer technical involvement to ensure that that right approaches are being adopted. The ESE is in a prime position to provide this advice.
 - There is a feeling that the training components offered at global meetings has had a very strong economics focus and the teams would like to be consulted on what other types of training, for example on behavioural change, would be useful. The project management could initiate a consultation with teams six months in advance of the global meetings to understand what training would be most beneficial to them.

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Project Identification Table

Project ID:	3807	Project Code	GFL-2328-2740-4634
Focal Area(s):	Biodiversity, Ecosystem management	Implementation	UNEP Division of Environmental Policy Implementation (DEPI) Other Executing Agencies: CEAZA - Chile, CSIR - South Africa, UWI - Trinidad and Tobago, ISPONRE – Viet Nam
Thematic Subprogramme	Ecosystem management	GEF Allocation	USD6,296,637
		Co-Financing	USD19,620,551
		Total Cost	USD25,917,188
Programme Element		Project Duration	4 years
Geographic scope	Global (with pilot sites in Chile, Trinidad and Tobago, South Africa and Lesotho (transboundary) and Viet Nam	Actual start date:	28 January 2011
		Completion date:	31 December 2014

1 Evaluation Background

1.1 Context

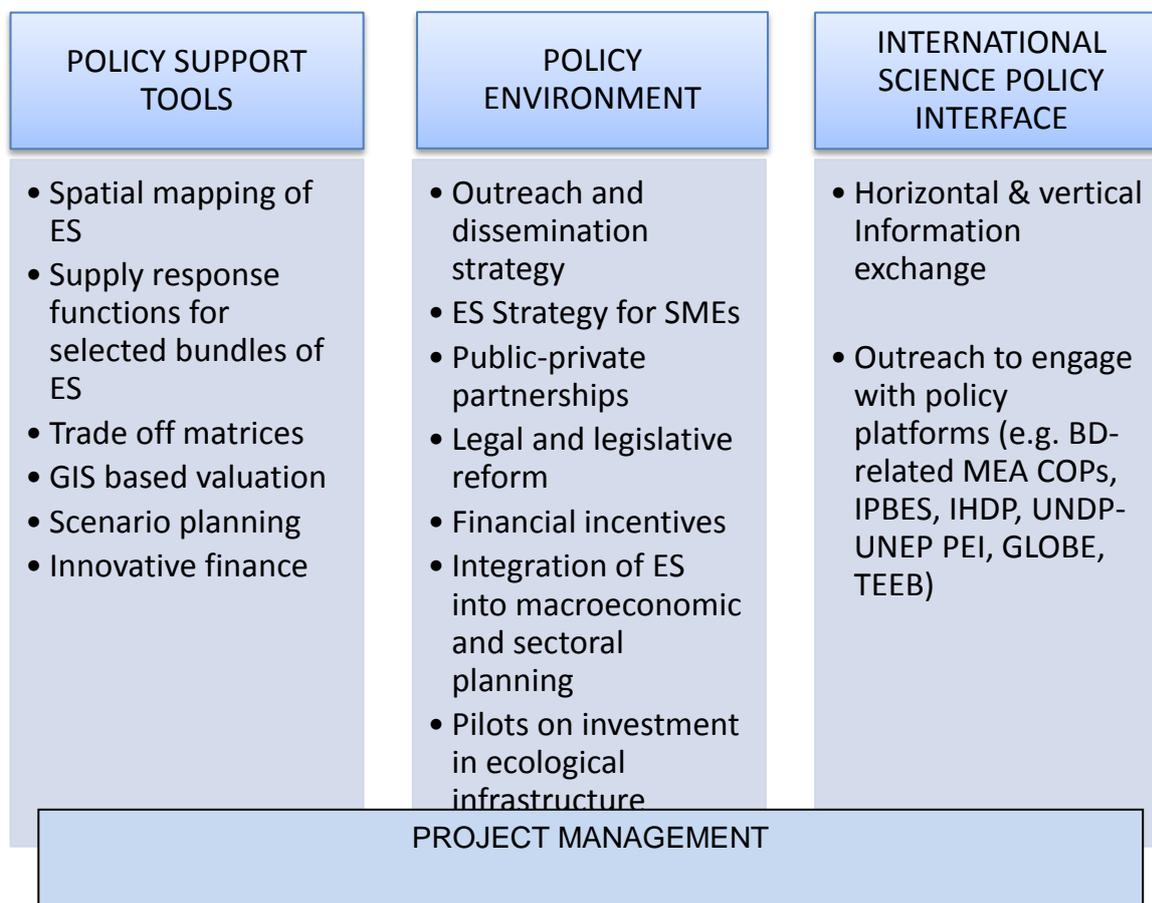
1. The Project for Ecosystem Services (ProEcoServ) is a four year project with a total budget of around USD26 million. The Global Environment Facility (GEF) Implementing Agency is UNEP/DEPI (Division of Environmental Policy and Implementation) GEF BD/LD Unit, and the Executing Agency is UNEP's DEPI Ecosystem Services Unit. The project thus falls within the special category of UNEP's 'internally executed' GEF projects.
2. The project is being piloted in five countries – Chile, South Africa / Lesotho, Trinidad and Tobago and Vietnam. The national Executing Agencies are: the Institute of Advanced Studies on Arid Zones (CEAZA) in Chile, the Council for Scientific and Industrial Research (CSIR) in South Africa/ Lesotho, the University of the West Indies (UWI) in Trinidad and Tobago in collaboration with The Cropper Foundation (TCF), and, the Institute for Strategy and Policy on Natural Resources and the Environment (ISPONRE) in Vietnam.
3. The project's inception phase ran from October 2009 to March 2010, during which the UNEP's initial global project execution team was composed and the workplan was revised. The project was signed in August 2010. From March 2010 to June 2011, the global team focused on recruiting the global project manager, preparing contracts with the pilot country institutions and organizing the global inception workshop. The country teams recruited their national project managers and technical teams within this period. The project became fully operational and fully staffed in **June 2011**. From June to December 2011, the countries held their national inception workshops and project launch events. The first global steering committee meeting was held in May 2012. Over the period May 2012-2013 the project gained significant momentum and international visibility, however due to the initial delays implementation is still behind that planned. The second Global Steering Group Meeting was held in May 2013, at which it was agreed to extend the project to the end of December 2014.
4. This Mid Term Evaluation (MTE) assesses project performance to date, and determines the likelihood of the project achieving its intended outcomes and impacts, including their sustainability. Recommendations are provided to help ensure that the activities over the remaining eighteen months of the project are structured to maximise the project's outcomes.

1.2 The project

5. ProEcoServ is viewed as a flagship project focussed on mainstreaming ecosystem services (ES) into development policy. It builds on the Millennium Ecosystem Assessment (MA), its sub-global assessments (SGA) and the ongoing MA-follow-up process. It aims to address some of the MA's shortcomings through: a focus on national assessments; close involvement of national and local stakeholders; and tool, model and method development for decision makers and policy implementation to mainstream ecosystem management approaches into development policies. ProEcoServ aims to go beyond the science of the MA, developing evidence on the how ecosystem services impact welfare and economies, and using this to influence key sector planning frameworks and macro-economic planning models. The key contribution of ProEcoServ is therefore demonstrating successful processes for the uptake of ecosystem assessment policy tools by decision makers.
6. The project is adopting an umbrella approach, under which five countries (four pilot studies) re-assess their MA sub global assessments and develop site and policy-specific activities and tools for decision making that have the potential to be scaled up and replicated globally, thus reducing threats to globally important biodiversity. Tools and frameworks to facilitate mainstreaming are being developed at the local, national and regional scale. The pilot countries are – South Africa (with a transboundary component in Lesotho), Trinidad and Tobago, Chile and Viet Nam.

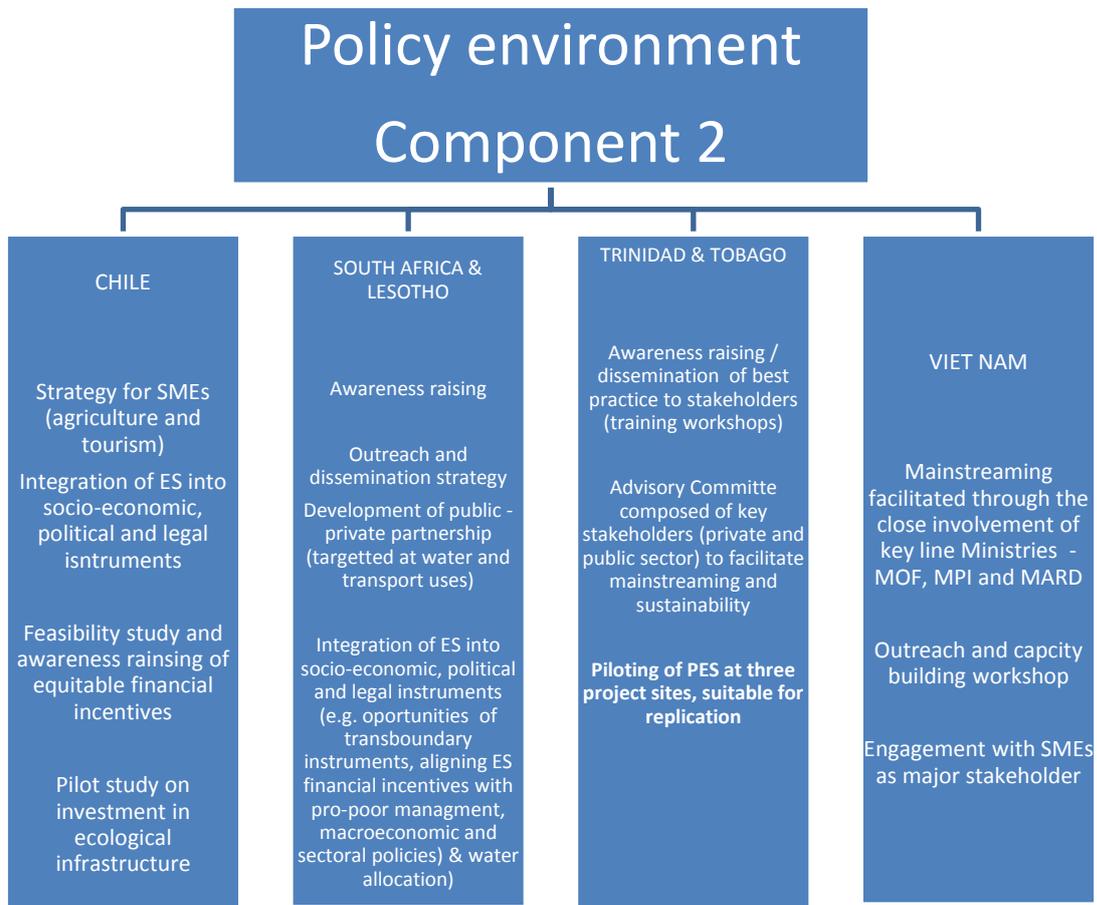
7. The project consists of four components – policy support tools, policy environment, international science policy interface and project management (Figure 1):

Figure 1: Overview of Project Components



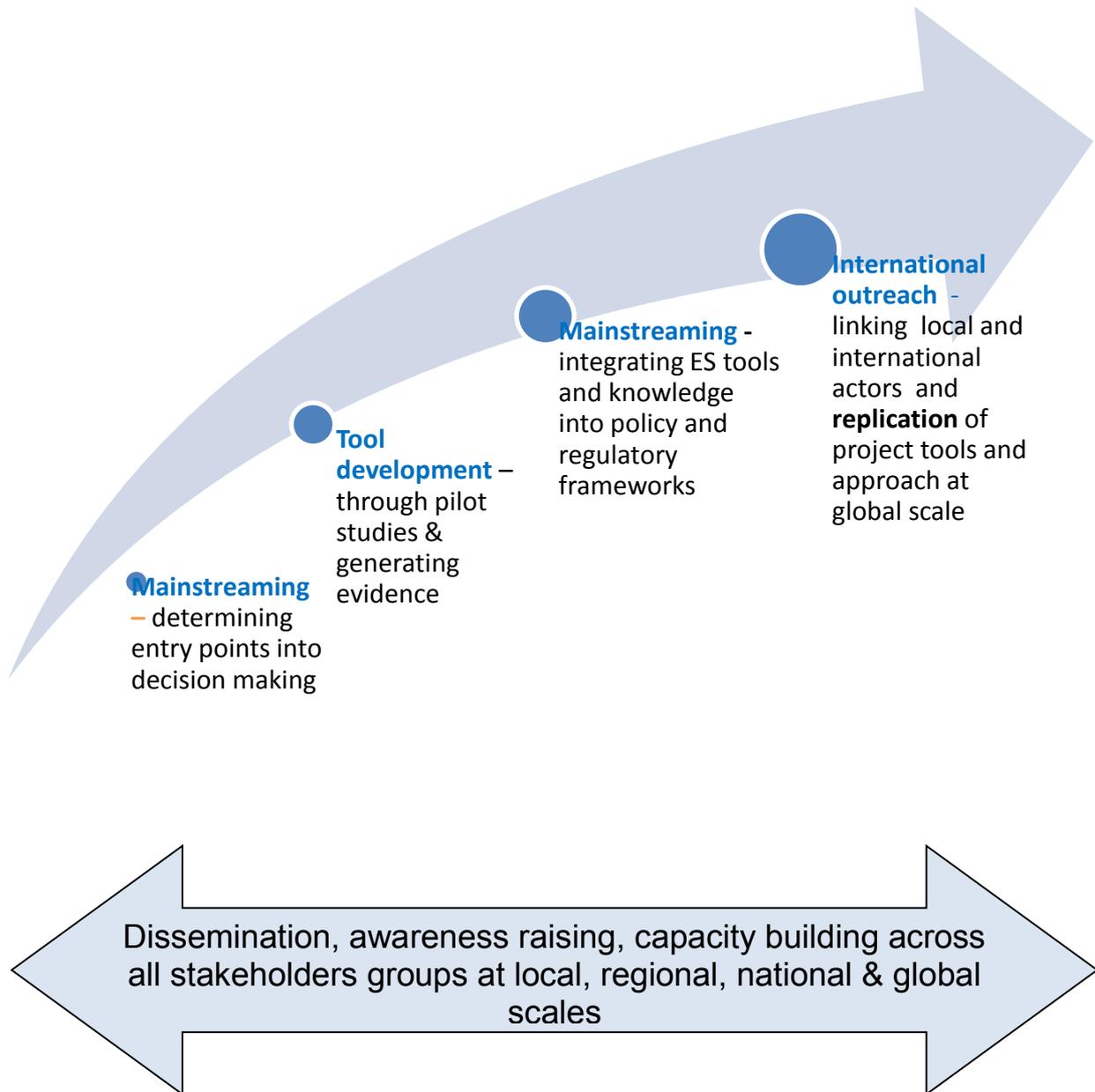
8. **Component 1 – Policy Support Tools** will develop locally valid tools and decision support models that can work at various scales, which will enable decision-makers at national and sub-national levels to understand the importance of ecosystem services and the tradeoffs involved in their use and to apply this knowledge in development planning and policy making.
9. **Component 2: Policy Environment** will support the application of ecosystem and ecosystem service management approaches in policy implementation at the national and transboundary levels. Figure 2 summarises the outputs for each pilot under component 2.
10. **Component 3. International Science Policy Interface** aims to strengthen the science-policy interfaces to reinforce multi-scale linkages from local to international actors, as well as to bridge the gap between research results and policy application in developing countries and the international biodiversity arena. Therefore under component 3 the tools developed and lessons learnt in mainstreaming ES at the pilot sites are disseminated and applied at the international scale.

Figure 2: Outputs under component 2 – Policy Environment



An overview of the conceptual framework is provided in Figure 3.

Figure 3: Overview of the conceptual framework



1.3 Evaluation Scope, Objective and Methods

11. In line with the UNEP Evaluation Policy and the UNEP Evaluation Manual, this **Mid Term Evaluation** (MTE) has been undertaken half way through project implementation to analyse whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions may be required.
12. The MTE has the following primary purposes:
 - to provide evidence of results to date and of the likelihood of outcomes and impact in the future;
 - to meet accountability requirements;
 - to identify the challenges and risks to achievement of the project objectives and derive corrective actions needed for the project to achieve maximum impact and sustainability.

13. In addition, the MTE is expected to promote learning, feedback, and knowledge sharing through results and lessons learned among the Executing Agency and its partners, UNEP, the GEF and their partners.
14. The MTE was asked to focus on the following sets of **key questions**, based on the project's Logframe and current implementation issues, as set out in the TOR (Annex 1).
 - **What are the key challenges to project implementation and what remedies can be proposed?** What are the main issues underlying any significant delays incurred so far in project execution? How can these issues be addressed within the limits of existing resources and within the project timeframe?
 - **What progress has been made to integrate ecosystem assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning?** Is the capacity of each partner organization at the national level adequate to support the timely execution of the demonstration projects within the remaining time frame? If not, how can this aspect be improved? Is the operational, managerial and administrative support deployed by UNEP to support the country-level demonstration projects adequate to the task at hand? If not, how can this aspect be improved? In the current context, what can realistically be achieved in each country in the time remaining to the project?
 - **What is the status of the pilot projects?** What can realistically be achieved in the time remaining to the project?
 - **Can the project realistically achieve its intended outputs and objectives within the time remaining?** If not, what would be a more realistic time frame or what activities should be prioritized so that the main outputs and objectives can still be achieved in a timely manner? Can the major sub-contracts and other regional-level consultancies be effectively completed within the remaining time of the project? Will the results of these regional-level components effectively support the achievement of key project objectives at the regional/country/local level?
 - **What is the likely expected impact of the project in the current context?** Is the project in a position to achieve its targets as spelled out in its M&E Logical Framework? Can the project ensure the completion, wide dissemination and adoption of proposed measures and plans for the sustainable development of ecosystems in the target countries and areas? Is the project taking advantage of most recent best practices in ecosystem services?
 - **What is the status of M&E of the project implementation?** Has the project established an effective evaluation and monitoring system and is the capacity for M&E among project personnel sufficient? What is the status of the use of the Management Effectiveness Tracking Tool (METT)?
15. The methodology adopted for this MTE follows that proposed by the Terms of Reference (Annex 1). The project is evaluated against eleven criteria as is standard for all GEF projects.

1.3.1 Scope and methods

16. The MTE was undertaken between mid March and the end of June 2013. The evaluation included a desk-based review of available technical reports and management records for the projects and face to face interviews,
17. The following documents were reviewed:
 - Project design documents;

- Project reports such as the global and pilot country progress and financial reports, meeting minutes of the global and national Steering Committees; annual Project Implementation Reviews (PIRs), Annual Work Plans and Budgets and relevant correspondence;
 - All available technical reports;
 - Documentation available on the project website www.proecoserv.org.
18. A list of documents reviewed is provided in Annex 3.
19. Face to face and skype **Interviews** were held with:
- Project management and execution support in UNEP/DEPI and UNEP's Evaluation Office;
 - Project executing partners in the pilot countries
 - Representatives of the project and pilot country steering committees and the advisory committees,
 - Major co-financing (cash and in-kind) partners
 - Representatives of major partners and sub-contractors
 - Relevant consultants and other project partners
20. A list of stakeholders consulted is provided in Annex 2.
21. Country visits were undertaken to Kenya (Nairobi), Trinidad and Tobago, Viet Nam and Chile. The evaluator also attended the project's second Steering Group Meeting in Chile 8-10 May 2013. The visited countries were selected by the Evaluation Office, in coordination with UNEP/DEPI/ESE, UNEP/GEF/BD-LD Unit, with due consideration to cost effectiveness, budget and time factors as well as the need for an adequate and representative sample to support the findings of the evaluation. Skype calls and email were also used to communicate with key project stakeholders.
- The MTE has been an in-depth evaluation adopting a participatory approach whereby key stakeholders were informed and consulted throughout the evaluation process.
22. An Inception report was prepared ahead of the country visits to provide a foundation for the MTE. The Inception report focused on three key components:
- Initial theory of change analysis (based on the project design)
 - Initial review of the quality of project design
 - Development of the evaluation process and framework
23. The initial Theory of Change analysis was provided to the project management team in Nairobi and the country teams for review in late March.

2 Project Performance and Impact

24. This section provides the main evaluation of the project. It provides a discussion of the project's performance against each criteria A-K.

2.1 A: Attainment of objectives and planned results

25. This sub-section assesses the extent to which the project's major objectives have been effectively and efficiently achieved to date, and/or are expected to be achieved based on current performance, and their relevance. Project effectiveness is discussed in section 2.1.1, relevance in 2.1.2 and efficiency in section 2.1.3.

2.1.1 A1: Effectiveness

26. In order to assess the effectiveness of the Project, the **Review of Outcomes to Impacts (ROtI)** method has been adopted, as recommended in the Terms of Reference. The ROtI process identifies project activities, outputs and outcomes and assesses the likelihood of project outcomes progressing through potential intermediate states to final desired impacts¹. This is the standard evaluation format for GEF projects and includes two main outputs: (i) an impact pathway analysis, and; (ii) a rating of the project's achievement of its outcomes and its progress towards intermediate states.
27. The first stage in the ROtI method is to identify the project's intended impact, intermediate states, drivers and assumptions based on the **Theory of Change** of the project. The primary aim of all GEF project's is to achieve a specific category of impacts called "Global Environmental Benefits" defined as "lasting improvements in the status of an aspect of the global environment that safeguards environmental functioning and integrity, as well as benefiting human society"².
28. The second stage of the ROtI method is the review of the project's Logical Framework (Logframe), to assess to what extent the project design was consistent and appropriate to deliver the intended impact.
29. The **Theory of Change Analysis** defines the project's potential logical progression from the outcomes it has set out to achieve to the ultimate desired impact. It includes an analysis of the barriers and opportunities for achieving the desired impact or development goal. The Theory of Change Analysis

¹ Under the ROtI framework the following definitions apply: **activities** are the practical, time bound actions that the project undertakes in order to achieve the desired project outputs (such as training workshops, technical advice, communications, research activities); **outputs** are the goods and services that the project must deliver in order to achieve the project outcomes, such as trained individuals the formation of institutions; **outcomes** are the short to medium term **behavioural or systematic effects** that the project makes a contribution to (e.g., adoption of new practices, changes in attitudes and issues, improved institutional competency, implementation of a new revised policy). Outcomes are designed to achieve the project's impact. **Intermediate states** are the transitional conditions between the project's immediate outcomes and impact, necessary to achievement the intended impact. Intermediate states are influenced by assumptions and impacts drivers. **Assumptions** are the significant factors that, if present, are expected to contribute to the ultimate realization of the projects impacts, but are largely beyond the power of the project to influence or address. **Impact Drivers** are the significant factors that, if present, are expected to contribute to the ultimate realization of project impacts and that are within the ability of the project to influence. An **impact** is a fundamental and durable change in the condition of people and their environment brought about by the project. The intended project impacts provide the overall justification of a project. A project will only expect to contribute to the achievement of impact, and often the impact will only be realized many years after project completion.

² ROtI Practitioner's Handbook, GEF, 2009

can be refined and strengthened by evidence collated through the project evaluation process. The MTE can therefore potentially play an important role in refining the Theory of Change.

30. A starting point of the Theory of Change assessment is the identification of the project's intended impact. The overall objective of the project, as set out in the Project Document, is to demonstrate how best to use the findings of ecosystem service assessment in policy and decision making at various scales in the four pilot studies. The desired (longer term) **impact** of the project is to reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making. The GEF investment is expected to generate significant global benefits in large grass - and dryland, coastal forest and marine ecosystems while at the same time contributing to a *paradigm shift* toward the integration of ecosystem services into development planning. The expected global environmental benefits include³:
- Stabilisation of ecosystem services;
 - Conservation of globally significant species and habitats;
 - Ecosystem services data and approaches incorporated in sectoral and macroeconomic planning;
 - Identification of good practice and lessons learned for a global strengthening of ecosystem management and services approaches.
31. Through these activities, the project provides an opportunity to generate targeted national and global benefits at significant levels, among these:
- Long-term conservation of species and habitat diversity, linked to reduced direct impacts and increased connectivity with relevant development processes;
 - Enhanced conservation of ecosystems, such as mangrove wetlands, drylands and coastal and marine ecosystems;
 - Improved protection for species diversity.
 - Enhanced complicity and convergence of policy frameworks with ecosystem services approaches;
 - Strengthened habitat and ecosystem resilience;
 - Development of and access to innovative biodiversity conservation financing instruments.
32. A complication in undertaking the Theory of Change analysis is that the terminology adopted in the project document and project management documents do not perfectly map with the Theory of Change (e.g. intermediate states and impacts are not explicitly referred to). However, the impact is based on logic for the project as set out in the project document. A Theory of Change Analysis for ProEcoServ is presented in Figure 4.
33. ProEcoServ's main contribution will be the testing and demonstration of mainstreaming approaches. The starting point for the project is therefore the identification of opportunities for mainstreaming. The design of the policy support tools is then tailored to address the priority mainstreaming opportunities that the project seeks to realize. At the outset it is recommended that a route map / process for the successful mainstreaming of ES at the pilot site is developed so that the country teams are clear on the main stages / steps in the process, timeline (aligned with key policy and regulatory entry points) and key institutions that need to understand the tools being developed. Consideration of the replicability of the tools / mainstreaming process also needs to be considered at this early stage to ensure sustainability of project outputs and that the project meets its intended outcomes at the international scale.

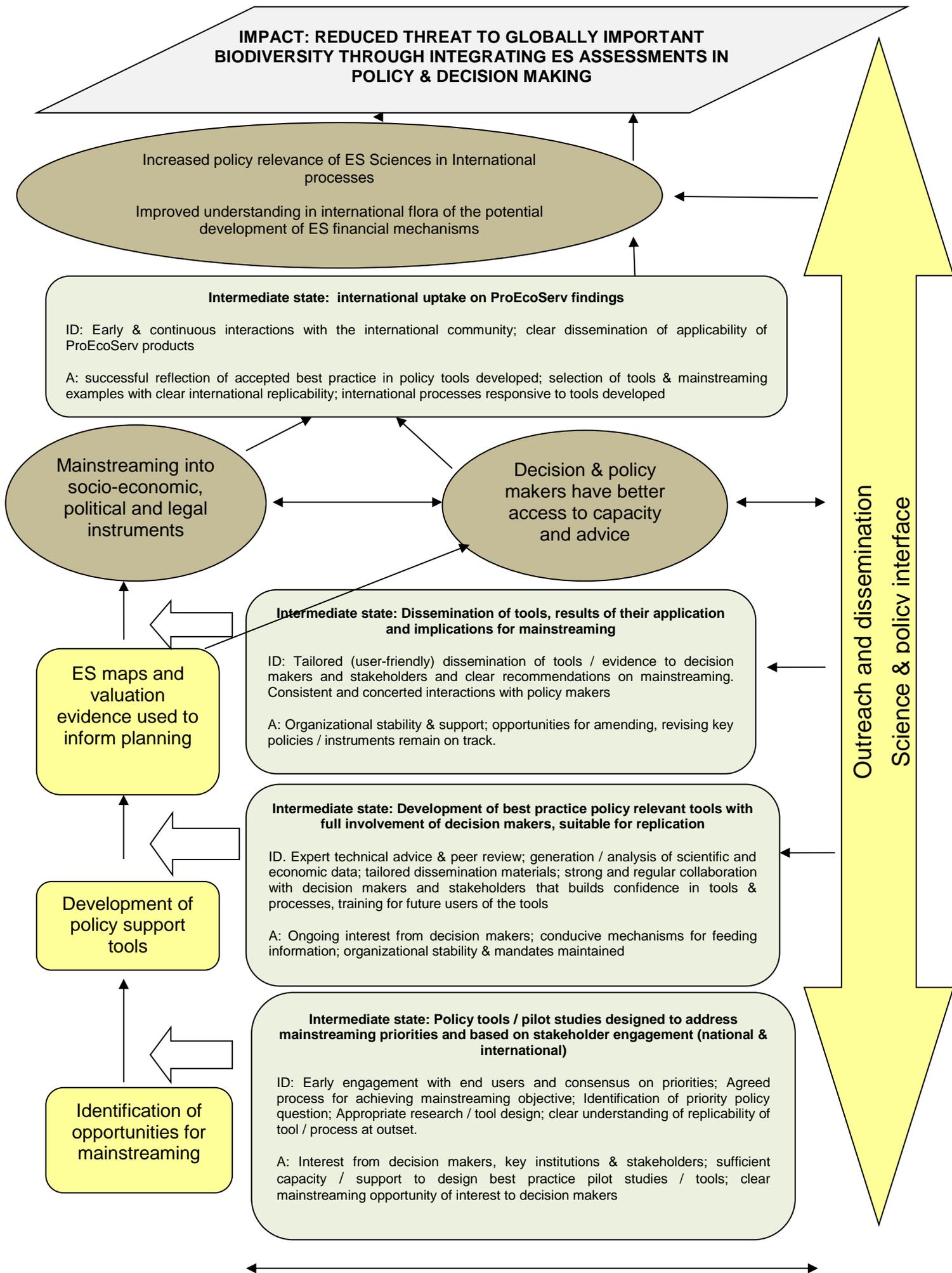
³ These are the expectations as specified in the Project Document. "Globally significant species and habitats" are not defined in the Project Document and the relationship between globally significant biodiversity and ecosystem services has not been explored to any detail through the project so it unclear how the achievement, or not, of this global benefit will ultimately be evaluated.

34. Throughout the project there is the need for a strong outreach and dissemination process, at the pilot, national and international scale. At the pilot / national scale this will ensure that the key decision makers (end users of the policy tools) fully appreciate the products and take ownership of them and the evidence generated by the pilot studies. On-going outreach at the international scale is required to ensure that the tools developed reflect best practice, and to facilitate confidence in their uptake beyond the pilot sites – an anticipated outcome of the project.
35. A project risk is that Governments can change and along with them key decision makers, such as Ministers. Time may therefore be invested in senior politicians who are then replaced, requiring the project to start to influence a new group of decision makers.
36. The project timeframe is 4 years. The project involves the development of scientific and socio, economic support tools and the influencing of decisions. Awareness raising is a key part of the process. The delivery of the project within the timeframe depends on the successful development and acceptance of the support tools and the availability of timely opportunities influence policies. Delivery of the project is therefore contingent on the ability to generate enough data to run the tools effectively and provide convincing evidence to decision makers, and the identification of decision makers to champion the findings, across the pilot sites and internationally.

Code for Figure 4:

Impact	
Outcomes	
Outputs	
Intermediate States	
ID	Impact Driver
A	Assumption

Figure 4: ProEcoServ – Theory of Change



37. A review of the project's results (logical) framework was undertaken to assess whether the design of the project is consistent with, and appropriate for the intended impacts. The logical framework sets out the strategic objective of the project, the project objective, the project outcomes and outputs. It also set out objectively verifiable indicators – indicators, baselines and target, by which the outcomes and outputs can be measured / assessed, verification methods and assumptions. While the **activity** level is not formally considered in the Theory of Change, it is useful to understand the link between the project activities, outputs and outcomes. Table 1 lists global Expected Outputs and Outcomes by project component. The Logical framework includes assumptions but not impact drivers.
38. The narrative on the intervention logic is provided in various places in the Project Document. For example, ‘ By building on existing capacity developed during the MA and working at specific sites that were already involved in the MA, there is a high likelihood that the application of decision and policy support tools will result in tangible global environmental benefits. The development and testing of policy support tools as well as the close engagement of policy makers will equally provide important lessons on how to mainstream biodiversity conservation and ecosystem management into sectoral policies and development processes, well beyond the pilot countries’.
39. However, as set out in the TOC, the starting point for the development of the policy support tools / mainstreaming process is the demand and interest of policy makers, and the identification of an opportunity (or policy window) for the project to influence the decision making process. This, along with the various intermediate states is not totally explicit from the Logical Framework.

Table 1: Project components, outputs and outcomes

Project component	Expected Outputs	Expected Outcomes
Policy Support Tools	<p>1.1.1 Spatial mapping of ecosystem services.</p> <p>1.1.2 Estimation of supply response functions for selected bundles of ecosystem services.</p> <p>1.1.3 Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being.</p> <p>1.1.4 GIS-based valuation of ecosystem services at sub-national levels, chiefly for regulating services.</p> <p>1.1.5 Decision support systems to guide decision makers on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services.</p> <p>1.1.6 Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries.</p> <p>1.1.7 Development of scenario planning as a decision support tool for understanding risk, uncertainty and building resilience.</p> <p>1.1.8 Scenarios produced for the bundle of ecosystem services under different plausible futures.</p> <p>1.1.9 Participation of local stakeholder groups in piloting scenario planning.</p> <p>1.2.1 Scoping for innovative international markets for ecosystem services</p>	<p>1.1 Decision- and policymakers have access to strengthened capacity and advisory services to analyse how decisions affect selected bundles of ecosystem services, incorporating resilience, risk and uncertainty factors.</p> <p>1.2 Improved understanding in international fora of the potential for the development of new financial mechanisms for ecosystem services</p>
Policy Environment	<p>2.1.1 A systematic outreach and dissemination strategy on ecosystem services developed and executed in the four participating countries</p> <p>2.1.2 An ecosystem services strategy developed for selected SMEs.</p> <p>2.1.3 Partnerships built for public-private cooperation for ecosystem management</p> <p>2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services (baseline to be established)</p> <p>2.2.2 Promotion of equitable and pro-poor economic and financial incentives for sustaining ecosystem services</p> <p>2.2.3 Ecosystem services maps and valuation used to inform macroeconomic and sectoral planning</p> <p>2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services.</p>	<p>2.1 Increased awareness and involvement of targeted stakeholders in ecosystem services management in the pilot countries</p> <p>2.2 Ecosystem services are considered for integration into socio-economic, political and legal instruments</p>
Science Policy Interface	<p>3.1.1 Horizontal and vertical information exchange established on ES sciences, tools and policy processes</p> <p>3.1.2 Outreach strategy developed to engage with policy platforms on ecosystem services (e.g. BD-related MEA COPs, IPBES, IHDP, GLOBE, TEEB)</p>	<p>3.1 Increased policy relevance of ecosystem services sciences' results in international BD and ES related processes</p>

Source: Project Document

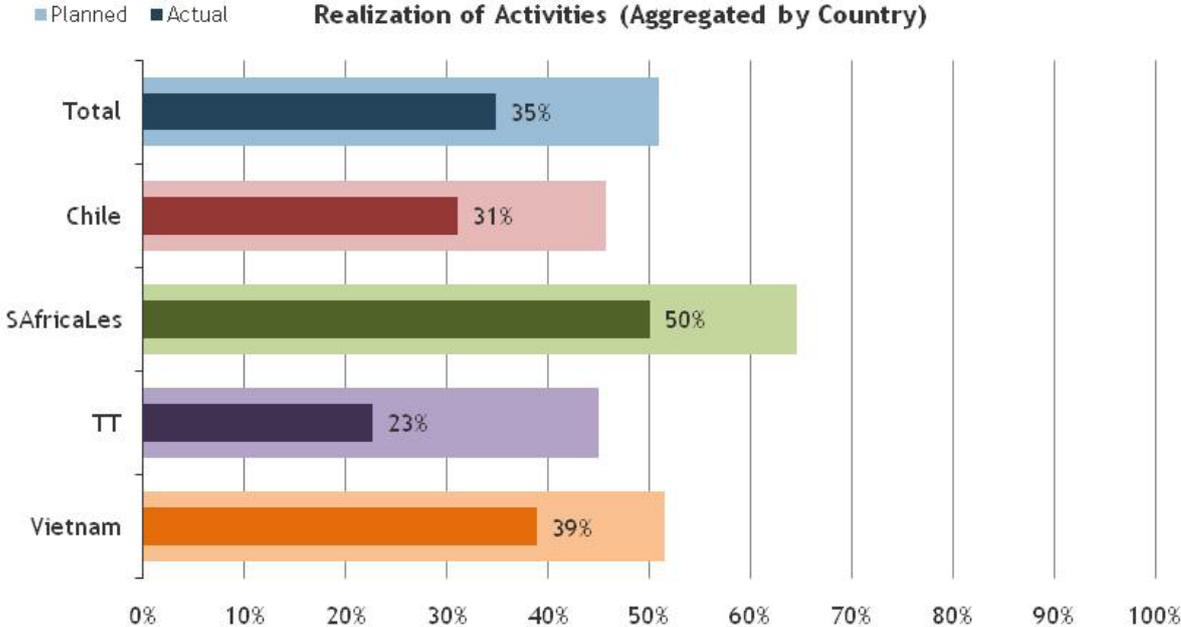
2.1.1.1 Activities / outputs

40. The project document provides an overview of the activities by pilot country and at the global level, per planned output. The large number of activities – 271 in total (Chile – 60, South Africa and Lesotho – 63, Trinidad and Tobago – 78, Viet Nam – 65, Global – 6), indicates the complexity of the project and the need for strong management across the pilot projects and globally to achieve the project's outputs and outcomes. To a certain extent countries are routinely following all the activities set out in the Project Document, without fully understanding and evaluating how the activities fit together and how each activity contributes to the ultimate objective of the project. It would be more useful / powerful to have a joined up output, and this may well require some rationalization of the activities following the MTE. The large number of activities has also generated a lot of reporting requirements

which some countries have found onerous, and which again, in some cases, have been undertaken without and clear focus on the final output / objective of the work. It would have been more efficient for some activities to be linked for reporting requirements⁴⁵.

- 41. According to the Project’s half yearly progress report for the period July to December 2012 the project implementation is now largely getting on track, even though the late start of the project may still result in a delay in the project completion date. Figure 5 provides an overview of the activities completed compared to planned for the pilot countries. Overall, actual completion of activities, as of 31 December 2012, is 35%, compared to the planned level of 51%. Implementation is lowest in Trinidad and Tobago at 23%, indicating a need to accelerate project activities over the remaining project period.

Figure 5: Realization of Activities by Country



Source: ProEcoServ Half Yearly Progress Report, July to December 2012

- 42. Overall progress in activities under Component 1 (Policy Support Tools) is 38%, compared to the planned rate of 52%. All activities are behind schedule except 1.1.6: provision and dissemination of practical tools, and guidance. For Component 2 (Policy Environment) 29% of activities are completed compared to a 46% planned completion level. Component 3 (Science-Policy Interface) is in line with the workplan. Detail per activity for each country is provided in the progress report.
- 43. There have been 145 reports submitted to date, with 38 pending. However, very few reports have been peer reviewed.
- 44. Table 2 provides an overview of the work being undertaken in the pilot countries. This is described in more detail below, with a summary of the key challenges in each of the pilot countries, in order to provide context and background for the rest of the MTE.

⁴ This has been done to a certain extent by South Africa
⁵ Combining activities/outputs for peer review may also be considered by the project.

45. It can be seen from Table 2 that there is a lot of heterogeneity across the countries in terms of ecosystems being studied (grass and dryland, forests (terrestrial and mangrove) and marine ecosystems) and the scale at which the analysis is being executed (ranging from site specific, catchment, provincial to national scale). This should provide a good range of examples of how mainstreaming can work at different scales, for different ES, and in different institutional context. This was the intention of the project, which was designed such that Individual countries would develop specific sets of activities that took into account the particularities of their national institutional and policy framework as well as their ecosystems. The countries also differ in terms of their levels of awareness and capacity in Ecosystem Services at the outset of the project and in terms of data availability.
46. All countries are using InVest, highlighting the need for countries to be very clear on the limitations of this model when reporting their findings. However, countries are also using other models of ecosystem services where available, for example South Africa is testing other tools in the work in the area of disaster risk and regulating ecosystem services
47. A range of policies are being targeted by the project at various scales. While there have already been some successes in integrating ecosystem services concepts at the national strategy level, the link between the tool development and policy target generally needs to be better defined at the demonstration scale. However it is understood that examples of mainstreaming at the demonstration scale are now available. These demonstration sites provide an important opportunity to illustrate how strategies and high level policies can be implemented.

Table 2: Summary of work in pilot countries

Country	Pilot sites / scale	Key ES	Tools	Mainstreaming (policy, plan, process)
Chile	San Pedro de Atacama Drylands / Desert (Municipality)	Water Tourism	Water Balance Model InVest (Biodiversity: Habitat Quality and Rarity Model)	EIA Land Use Planning Regional Plan of development (?) Local Plan of development (San Pedro) (?)
South Africa	National level	Water, drought mitigation, grazing, erosion control	Ecosystem service maps Communications	Water Policy Resource Strategy National Development Plan
	Eden district (District)	Flood / fire control, storm surge – Disaster management	Decision support system	Disaster Management plan / National Disaster Management Act
	Olifants catchment (Catchment)	Water (quality / quantity)	Tool of compiled data for integrated environmental flow assessment	Water resource classification
Trinidad & Tobago	National Level	All	Ecosystem Services introduced in SEA	National Spatial Development Strategy
	Nariva swamp - Trinidad (Site specific)	Pollination, Carbon	Exclusion studies InVest (Valuation Scenario analysis) Carbon Model	<i>Need to be specified</i> Links to local livelihoods Spatial planning Agricultural policy?
	Eastern Northern Range, Caura and Maracas Valley - Trinidad Forest (Site specific)	Soil retention, Water purification	RUSLE Valuation	Hillside Regulation (development) Policy PES? Interest in damage cost of flooding?
	South West Tobago – Coral reefs, mangroves, seagrasses (Site specific)	Shoreline protection	Mapping & Modeling using InVest and Alternative model Scenario Analysis Valuation	Marine spatial planning
Vietnam	Ca Mau province mangroves (Provincial)	Coastal protection Carbon storage	InVest Valuation & Scenario analysis	Land use planning <i>Need to be specified & developed with local stakeholders</i>

Chile

48. In Chile the work is focused on water provision and tourism in San Pedro de Atacama, a fragile desert ecosystem. San Pedro de Atacama is the centre of pre-inca Atacama culture, and has been home to indigenous communities dating back 11,000 years. The area is facing pressures from mining (lithium and copper). San Pedro de Atacama is also the third most important tourist destination in the country, after Easter Island and Torres del Paine. The majority of people in the area are dependent on tourism however it is largely unregulated and information on the carrying capacity of the area is required to develop a sustainable tourism plan.
49. Ecosystem Services is a new topic in Chile and the project is considered to be very important as a means of putting the case for ES to policy makers. The project in San Pedro de Atacama can therefore serve as an example for other regions, assuming that its findings are supported by regional policy makers and communities.
50. The following tools are being developed:
 - Mass Balance Water model
 - Tourism model

The Mass Water Balance Model

51. The key tool to be developed by the project is the Mass Water Balance Model (Easy Balance Program). This is an internationally established tool covering surface and groundwater supply and use, which is being adapted for the site. Water is a contentious and critical resource in the area required for mining operations but also for the sustainability of the area's ecosystems (including National Parks supporting flamingos and other important fauna and flora) and for tourism. However, currently the amount of water in the basin is unknown. The objective is to determine the amount of water available, and to understand the interdependence between different areas, for example, how water abstraction from an area would impact the lagoons. To date the project has generated a new hydrological map setting out the location and limits of the basins, which were previously unclear.
52. There are 12-15 basins in the area. The main basin is San Pedro where there are a lot of existing studies by the mining companies, undertaken as part of their Environmental Impact Assessment (EIA) requirements. The project also includes the high altitude basins where there is not much data. Key data sources and collaborating partners are:
 - General Water Department (DGA) – climate data, precipitation, temperature and evaporation data;
 - Municipality – local knowledge and validation of the data;
 - Ministry Of Environment (MOE) - reports on ES and limits of lagoons and the evolution of wetlands;
 - National Forestry Commission (CONAF) – support on field trips;
 - Mining companies – flow rates of surface water, level of groundwater, geochemical data of groundwater.
53. The next steps in developing the Mass Water Balance Model are to:
 - manage data in a common database
 - calculate rates of infiltration to recharge
 - identify recharge areas
 - quantify abstractions (agriculture, mining, tourism).

54. It is hoped that Water Balance Model will be ready by the end of the year. It is expected that some data will be missing, and emphasis is being placed on building a good tool that can be populated with additional data in the future as it becomes available.
55. The MOE in Antofagasta would like to use the mass water balance model in their assessment of EIA, to understand the impacts on new water abstractions on the environment. For example the impact of lithium mines on the salt lakes. The tool will help them identify optimal land uses and to present an analysis of the impacts of proposed activities to the public. The model is seen as first step towards developing a holistic monitoring system and provides a baseline for other projects in the future. Other on-going related projects managed by the MOE include the effects of climate change on water beds. This tool could also be used to bolster Chile's international reputation, as the perception is that Chile has handed over a lot of land to lithium production, and the tool will be able to demonstrate that water is being allocated in a sustainable way.
56. The tool will also be central to the work of the DGA who receive many requests for water abstraction, and at present cannot base allocations on an understanding of how much water there is in San Pedro de Atacama, or on the impacts of existing and new abstractions. **However, to date the DGA have no understanding of the design and features of the model and this represents a real risk for the project.** While they have been asked for data, they have not been involved at the outset on discussions on the design and capacity of the model (i.e. tool development). Without this involvement and understanding they are unlikely to approve the model. This would be a repeat of the outcome of the work undertaken for the Millennium Assessment when the DGA and communities did not approve the findings because did not find the data credible. The DGA and the communities therefore urgently need to be brought into the developed of the model. It is understood that to facilitate communications between the DGA and the project a formal written request is required, known as an 'Oficio'.
57. Recently water directors held a national congress at which they identified that a water balance project was a national need. The President launched a national water strategy in 2013 and the DGA needs to understand how the ProEcoServ model is aligned with this. Of significance is that this water strategy mentions potential use of water balance models – providing high level strategic support for the tool being developed for San Pedro de Atacama, and its subsequent replication.

Tourism Model

58. Work is less advanced on the tourism model. The intention is to firstly evaluate the relationship between local ecosystems and ecotourism, *i.e.* how tourists value and use ecosystems for recreation, and secondly, to understand how tourism activities, as well as other key drivers of ecosystem change (mining), affect ecosystems, particularly in terms of their provision of recreation benefits. This will establish the basis for the Decision Support System (DSS) for ecotourism. A framework for understanding the ways that ecosystems provide tourism benefits in the *comuna*, and the ways that change drivers impact these ecosystems, is being developed. Several biophysical models are being explored for their combined potential to evaluate these links and feedbacks, the majority of which are InVEST models, including the Aesthetic model, Habitat Quality and Rarity model and Habitat Risk Assessment model. A tourism model is due to be released by InVEST this year, however its release has been repeatedly postponed, and at this stage it is unclear exactly to what extent it could contribute to meeting project objectives. Ultimately, the intention is that the DSS will utilize combined outputs from various biophysical models to provide the user with information regarding how any given development activity may affect ecotourism potential, integrated within a more user-friendly interface that can be executed without the requirement for advanced user skills. The water balance model will feed into the tourism modeling and mapping work.
59. To date ecosystem services maps have been generated. The National Tourism Service (SERNATUR) is very pleased with these maps, which were presented at a workshop. They have high expectations of the project's tools being able to help them define a zonal tourism plan for the area based on an understanding of the impacts. For example, guiding decisions such as the best place to locate an hotel

and its appropriate capacity / size, and whether tourism can be sustainably expanded outside of San Pedro itself.

60. The economic valuation work is just starting, and should be completed by March 2014. It is proposed to undertake a Travel Cost Method to value tourism, and a Contingent Valuation Study to value water. This is an area where greater supervision and peer review is considered to be important. It is *not* recommended that a contingent valuation study is taken, as this is a very specialized approach requiring a sophisticated survey instrument to avoid bias while remaining meaningful to the general public and a large sample size. It is also very difficult to sell to decision maker being based on a hypothetical market. Other approaches should be explored such as the production function approach. A survey will be required to undertake the TCM as there is at present very limited tourism data.

Challenges

- **Developing links to national policy and regulation.** The work in Chile is very focused at the municipality level. If the policy recommendations derived from the project do not link to national policies, the regional agencies will not have the mandate to comply with them. The water balance model appears to be supported by the National Water Strategy, however the situation is less clear for tourism. Under the National Tourism Strategy one of the pillars is sustainability, but ES are not detailed in any specific policies.
- **Building consensus among all stakeholders based on objective research.** Transparency in how the Water Balance Model is being built is critical to project success as there is a lot of mistrust between different stakeholders. The project is liable to fail if it just presents the final tool as people will be suspicious.
- **Building relationships between scientists and decision makers:** In general CEAZA need to be very focused on producing policy relevant and user friendly tools for the decision makers, and maintaining a timely flow of information to the project partners. To date a workshop involving institutional representatives and the consultants has been held, and it is understood that future workshops are being planned.

MOE: While the relationship between CEAZA and the MOE has improved over the past year, there is still room for strengthening this important partnership. While CEAZA are responsible for implementing the project, the project will not be successful without the support of the MOE so a good working relationship between these organizations is paramount.

DGA. It is understood that the project's hydrologist has a good relationship with the DGA in Santiago, and the Municipality of San Pedro de Atacama. However, CEAZA needs to work more closely with the DGA in Antofagasta on the Water Balance Model, as they will be responsible for reviewing and validating the model before it is released. This is a priority activity for the project. Presenting a final tool will not be as effective as engaging the DGA at all stages of the tool's development so that there is a common understanding of problems, data quality / implications of gaps etc. The project's hydrologist is returning to Spain in May 2013, presenting a serious challenge for the project. There is a limited travel budget for consultant travel (USD10,000) and face to face meetings with the DGA and the Municipality are required to ensure the users understand the tools. This is a very sensitive area and a specialist is needed to head this work.

SERNATUR are very supportive of the project and would like to be more closely involved and to have contact with CEAZA.

The **municipality of San Pedro de Atacama** are central to the project's continuity. This is especially relevant given the turnover at national and regional Ministerial level. It is important that the municipality understand the tools being developed, although this transfer of knowledge has not started in earnest as yet. The Municipality are in support of the project and would like to

be more involved. At present they do not feel enough part of the process. The Municipality can also become more closely involved in communications. A general feeling is that information on the project has *not* been communicated to the communities in words that they understand because as yet they do not understand the objective of the project. It would be better for people from the area to be involved in this process rather than outsiders. It is recommended that (i) within the Municipality a technical team is more closely engaged such that they understand the tools in detail and are able to apply them (ii) Municipality lead on disseminating project to communities.

- **Continuity of experts and communities involved in ProEcoServ:** There has been some turnover of community representatives at meetings and often new attendees have limited background in **project** and do not agree with existing decisions resulting in delays. Staff turnover is also an issue at the regional Government department level, stressing the importance of empowering technical teams as well as key decision makers.
- **Working with indigenous communities.** Key to the project's success will be the support of the local indigenous communities. There are 17 different communities in the area, represented by families, and with their own legal authority / rights. It is important that the communities understand the project (this is a prerequisite of their support) and agree with its findings. However the project has faced a number of challenges in this respect:
 - The communities feel that the initial idea for the project did not come from them but from the MOE and CEAZA, and that they were not adequately consulted at the outset.
 - CEAZA, as an 'outside' organization has to work extra hard to build relationships with the communities, especially since they have had no prior involvement in the area.
 - The project has tried to build awareness and has held several workshops and face to face meetings in order to define the ecosystem services. However, as yet the communities do not have a concrete understanding of the project.
 - Water abstraction for mining is a very sensitive issue for the communities and there is a misconception on the part of the community that mining is *not* being incorporated in Mass Balance Model. It is important that this misconception is dispelled as it will be key to the communities accepting the results / model.
 - The local co-ordinator requires more support to do his job effectively. The issue appears not to be one of time but of being clear on what he is doing and messages to communicate, and being provided with adequate support from CEAZA.
 - The communities are geographically spread out so it is difficult to get a good presence at workshop. Sometimes CEAZA hires a bus to pick everyone up
- **Data Availability**
 - The mechanisms for data collection were not working properly in the first year of the project. This has subsequently improved and reportedly the data for the Water Balance model has now been largely collected and the next steps are for the consultants to systematically organize the data and then analysis it. The data has been collected by the regional co-ordinator (MOE).
 - It has been a challenge to obtain data for the Mass Water Balance Model because water is a sensitive area and there are conflicts between mining companies, indigenous people and public organizations.
 - Data gaps for the Mass Balance Water Model include: chemical analysis; data on snow melt important to understand recharge; and, flow rates of different rivers and

streams. Where possible hypothetical approximations will be used in the model where data is missing as it is not possible to generate more data within the timeframe of the project. It is intended to collaborate with the key institutions to agree approximations for missing data.

- The available data on tourism is very general, captured by the National Statistics Institute (INE) and CONAF (Forestry Institute). CONAF have data on visitors to national parks. INE on how many people arrive and sleep. Data on the motivation of tourists and their expenditure in San Pedro, and the areas carrying capacity for example, are not available. A workshop was planned following the second ProEcoServ SC in May 13th and 14th in San Pedro de Atacama to try and build up data on tourism, there may also be the possibility of SANATUR undertaking a survey.
- **Capacity** issues are illustrated by the fact that two foreigners are part of the CEAZA technical team due to lack of expertise in Chile – an InVest model specialist and a hydrologist. CEAZA are currently advertising for a Hydrologist, but in the first announcement a suitable candidate could not be identified. There is therefore a real need to build capacity through ProEcoServ and ensure that the tools are well understood by the users.
- **Project management (communications and co-ordination)** is a challenge given the location of CEAZA relative to the study site and the diverse stakeholders that need to be engaged with the ensure project success. Project management is discussed on more detail in section 2.2.5.

South Africa

61. South Africa is the only pilot country not visited as part of MTE. The information for South Africa is based on skype interviews, email exchanges and interviews with participants from Chile attending the Second Global Steering Committee meeting.
62. South Africa has good quality models and data to build on and there is an expectation within the project that South Africa can lead the way on mainstreaming. The UNEP Global Management team attended the last national steering committee meeting in April and has been generally happy with progress in South Africa. The project started late, with the project Cooperation Agreement (PCA) signed in February 2011, but the project has more or less caught up. At the mid point of the project the team feels they have a much clearer idea of what they want to do.
63. Key features of the programme in South Africa are:
 - ProEcoServ South Africa had a **clear focus on mainstreaming** from the outset (rather than data creation). While some additional evidence is being generated, the project is largely building on existing data and projects to achieve the mainstreaming objectives. The aim is to test various mainstreaming tools. In order to capture feedback and learning an assessment of the mainstreaming processes is planned in the project's final year. This documentation and assessment of the process should facilitate replication, and should be a very useful project output.
 - A **multiscale approach** is being adopted based on the hypothesis that different policies and processes operate at different scales. The project is working at 3 levels: (i) National policy and planning; (ii) District municipalities, which is the lowest tier of decision making (Eden Project); and, (iii) Catchment the scale at which water governance, water planning and allocations happen (Olifants catchment). Water is a thread running through all the projects.
 - CSIR, the national executing agency, isn't an academic institution making it easier to bridge the gap between science and policy. Furthermore, they are working closely with the South African National Biodiversity Institute (SANBI), an organization set up specifically to bridge the

science/academic and policy gap. SANBI is constituted by the National Biodiversity Act. CSIR have a team of 10-12 people who spend 20-30% of their time on the project.

64. ProEcoServ is building on on-going work to develop tools, training and awareness in **disaster risk the Eden District**, which represents a good opportunity for mainstreaming. In general there is a focus on disaster response rather than mitigation and preparedness in South Africa and ProEcoServ would like to illuminate the potential role ES can play in mitigation. The project is developing risk hotspots maps and working with the municipality to ensure that the products are well understood. The project wants to test and understand if these maps and communication initiatives could inform a spatial development framework – e.g. where can people live and farm. The maps have been used in a discussion document with the Natural Disaster Management Institute. Disaster management is a well resourced and respected sector in South Africa and funding has been provided by insurance companies to work out the risk associated with ecosystem management. This reflects an important move towards recognizing that climate change is not the only factor related to disaster risk, and that land management can play an important role. ProEcoServ is funding work with the municipality on mainstreaming.
65. Achievements:
- (i) At the national level ProEcoServ has contributed to national policy in the areas of water management (National Water Resource Strategy) and development (National Development Plan), and is in the process of developing a discussion document in the area of National Disaster Management and ecosystems;
 - (ii) At a local demonstration level there are opportunities to work on a disaster support tool ('Let's Respond to Climate Change') which are being piloted and is synthesizing and distilling the information on disaster risk into pocket guide.
 - (iii) At a catchment level ProEcoServ has successfully mainstreamed information on water ecosystems and their services into a decision tool used for water resources management
66. In the **Olifants catchment** ProEcoServ is trying to mainstream landscape / ecological infrastructure into water management. The work focuses on mainstreaming freshwater ecological infrastructure (for both water quality and quantity) into sustainable water resources management, targeting an integrated environmental flow assessment tool – Water Resource Classification – which is a key tool for developing a stakeholder-driven vision for water development futures at a catchment level and thus influencing water allocation. A generic method, piloted in the Olifants River catchment, has been developed for incorporating freshwater ecological infrastructure (ecosystem service stocks) into Water Resource Classification, using existing freshwater ecosystem priority area maps. This has been piloted in the Olifants, and has led to all Water Resource Classification scenarios, that depict different water development options, incorporating 82% of the identified freshwater ecological infrastructure requirements. The task also targets national policy processes for influencing Water Resource Classification in other catchments of South Africa.

National Level

67. An achievement of the project at the national policy and planning level is that the National Development Plan now mentions biodiversity / ecosystems 40 times, whereas before it was not mentioned. For the National Water Resources Strategy, ProEcoServ have been asked to write a chapter on Water ES which has now been included in the final published strategy
68. At the national scale **4 bio-physical maps** have been developed on water, drought, grazing and erosion. These maps provide the basis for looking at supply response functions and trade-offs. The main purposes of the maps are to (i) build communications and awareness; and, (ii) facilitate the decision making / planning / policy process (an intended focus).
- From the **water map**, strategic water resource areas have been identified. These areas cover 8% of the country and provide 50% of the country's water. The maps are feeding into the National Water Policy, which previously didn't mention ES but now has a chapter on this. The

maps have catalyzed other activities, e.g. WWF have a campaign with restaurants where customers can check a bar code on a glass to identify what resource area their drinks come from. There is also a website / media campaign to allow decision makers to trace the journey of water. The project intends to analyze who benefits from water sources and the equity of water supply, starting with big metropolitan areas which are key for cities.

- For the **soil erosion** maps the intention is to look at the effect of new dams on sedimentation and feed into the strategic infrastructure programme (SIPs) of SA, of which there are 18. The economic cost of sedimentation could also be determined. The project is also trying to propose a 19th SIP on ecological infrastructure.
- Through the **grazing map** the project is looking at the impacts of invasive plants on grazing capacity, and flagging grazing hotspots. This links to a Government initiative Working for Water, which is a poverty alleviation programme looking at job creation for ecosystem management.

69. Challenges:

- There is a lot of interest and awareness in this work but there is still much to do in terms of influencing planning. Maintaining stakeholder engagement is challenging as is moving away from awareness creation to what can be done.
- **Transboundary component:** Executing the transboundary component of the project with Lesotho has been problematic. Capacity in this area in Lesotho is limited – there is no department of ecology or local consultants, and Lesotho has had very little engagement in the project. In April 2012 the South African team was challenged to come up with something useful for ProEcoServ. They have spoken to teams in Lesotho and have identified an expert on transboundary issues. It is proposed that ProEcoServ engage in Phase 2 of Lesotho Highlands Water Project LHWP. There is also a request to change the way Lesotho is referred to in the project, which needs the approval of Global Steering Committee (SC), as Lesotho does not have the same type/ level of involvement as the other pilot countries.
- ProEcoServ has a strong **economics focus**, but this is not the only adopted approach in South Africa. The project has been designed to test a range of mainstreaming tools including biophysical and social tools (as well as economic tools). This approach is reflected in the team composition, and is an important consideration when determining how best countries can play to their strengths over the last 18 months of the project. South Africa has a long history of valuation work, which to date has had a limited impact on decisions. ProEcoServ have undertaken a literature review of economic valuation studies of ecosystem services in South Africa and there is the opportunity to engage with National Ecosystem Accounts (not Green Accounts). However there is a concern that the project may already be doing too much. Any economics work that may be undertaken under the project therefore needs to be carefully defined to complement other mainstreaming approaches being tested in the project. The project is generating new biophysical data, which could be used to update existing valuation work.

Trinidad & Tobago

70. The project in Trinidad and Tobago is being implemented by the University of the West Indies (UWI) and the Cropper Foundation. The project is fortunate to have both very strong academic input as well as a close relationship the Ministry of Planning and Development. To a certain extent a bridge already exists between the scientific community and decision makers through the National Project Coordinator, who has long standing professional ties with a number of senior politicians. Assuming

that tailored best practice tools can be developed within the project time frame, the chances of success in Trinidad and Tobago are considered to be high.

71. The project is focusing on 3 mainstreaming activities:
- Introduction of ES into National Spatial Planning
 - Development of a Payment for Ecosystem Services (PES) case study
 - Green National Accounts

National Spatial Development Plan / Strategy

72. ProEcoServ is working very closely with the Ministry of Planning and Sustainable Development to develop its National Spatial Development Strategy. The Minister has formally asked for ProEcoServ support.
73. This is a key planning tool with the ability to affect all future development in Trinidad and Tobago, and therefore a major opportunity for ProEcoServ. The Government is aiming to have this plan approved before the national election in 2015, which aligns well with the ProEcoServ timeframe.
74. It is important to the Government that the plan is grounded in international best practice, in order to build its credibility. This international credibility can be leveraged through ProEcoServ and this is one of the main reasons the project is seen as important by the Government. The Government want to include Strategic Environmental Assessment (SEA) in the planning process and have asked ProEcoServ to fund an international SEA expert to help integrate ecosystem services into this process. This would also help the Government fast track development of the Strategy by side stepping lengthy Government procurement procedures.
75. The Government has initiated three consultancies, which will be used as the basis for the spatial plan: (i) Situation Plan (GIS maps); (ii) Draft harmonization report, aimed at harmonizing the 14 regional development plans, which were produced by different consultants; and (iii) a Strategy consultation.
76. A new planning law is also due to be passed, which will include ES. The Planning for Facilitation and Development Bill (PFDB), will replace the Town and Country Planning Act 1968 and will facilitate wider community involvement in the planning process.

PES

77. Trinidad and Tobago is the only ProEcoServ pilot country explicitly exploring a PES mechanism. This is an area where the country could be highly successful given the support of the Green Fund, managed by the Ministry of Environment. The Green Fund is keen to fund a PES scheme and is waiting for a proposal from ProEcoServ. The Green Fund is providing USD10m for the Nariva swamp restoration in in-kind contribution and initially it was expected that a credible PES scheme would emerge from this work. However, the ProEcoServ project seems to be focusing its attention more on developing a PES scheme in the Caura valley.
78. The Green Fund was operationalized in 2008, and is capitalized by tax on corporate activity, namely 0.1% on gross sales or receipts of companies carrying out business in Trinidad and Tobago. The fund currently sits at around USD350 million. The purpose of the fund is to financially assist primarily non-profit organizations that are engaged in activities related to the remediation, reforestation and conservation of the environment. Examples of projects include (i) the Nariva Swamp Restoration, Carbon Sequestration and Livelihoods project; and (ii) The Northern Range – Fondes Amandies Community Restoration project.

79. The Green Fund would like to develop a programmatic approach for funding PES initiatives under which projects would be funded if they met set criteria, rather than having to apply through a proposal. Therefore the work by ProEcoServ in this area could be sustainable, catalytic and make an important contribution to job creation for communities.

Green National Accounting

80. During the first year of the project, a scoping study was undertaken (Girvan & Teeluckisng, 2012), which presents a conceptual background and initial high level estimates to illustrate how the Government could be misled if it does not consider the value of its ecosystem services. The work has not yet been disseminated, and would benefit first from a peer review. From a project management perspective it was felt that this work dominated the economics work in the first year of the project and detracted from other planned activities.
81. To properly scope and manage the economics component within the overall project it is important going forward to get activities on green national accounting formally recognized in the work plan and Logical Framework and to agree with the UNEP and GEF the scope of this work.
82. The project held an initial meeting with the Minister of Finance 18th March 2013, on the back of which the Minister has requested a technical meeting. This provides the opportunity to discuss Green National Accounting in more detail. The Government's Medium Term Policy Framework 2011-2014 provides enough on the Green Economy to form a platform for the Government's uptake of Green Accounting. Green Accounting provides a means for the Government to show that Trinidad and Tobago, as the second highest per capita carbon emitter in the world, is doing something in terms of environmental management and advocacy in this area is building. ProEcoServ is therefore well placed to initiate a program of work on Green Accounting.
83. The work on Green Accounting, if it is to be progressed under ProEcoServ, needs to be carefully planned / scoped with the Government so that the project is realistic about what can be executed within and by the project and in order to ensure work is sustainable post ProEcoServ. It is not realistic to think that a green accounting systems will be established within the project, however the project can play a key role in laying the foundations. Importantly, ongoing collaboration with the World Bank's Wealth Accounting and the Valuation of Ecosystem Services (WAVES) initiative can greatly assist in ensuring the rights steps are taken and that the work has continuity post ProEcoServ, perhaps as future pilot country.
84. ProEcoServ activities could include: (i) engagement with the Ministry of Finance and the National Statistics Office, under the Ministry of Planning and Sustainable Development, to build awareness and support; (ii) designing a road map for developing national accounts (existing capacity and training needs at the Central Statistic Office, data requirements, initial areas /sectors to focus on); (iii) development of a strategic plan for Green Accounting to be implemented post ProEcoServ; and, (iv) demonstrate accounting procedures through one of the pilot ecosystem valuation studies underway if feasible.
85. Challenges:
- Capacity: Capacity and manpower at the CSO is limited and it could be difficult for them as organized to add Green Accounting to their role, as they currently struggle to undertake their routine tasks. A review of the potential restructuring of the Central Statistics Office (CSO) was undertaken by Statistics Sweden about 8 years ago, but has not yet been implemented. Trinidad and Tobago has no experience in this area, so an experienced economist and technical support is required to undertake further work in this area.
 - Work on Green National accounts was not in the original proposal / work plan (but was added in 2012) and the Ministry of Finance is relatively new target involving new and additional

communications and technical material, which needs to be fully reflected in workplan, logical framework and budget allocations.

DEMONSTRATION PROJECTS

Tobago Buccoo Reef

86. This demonstration project is mapping and measuring shoreline protection provided by ES and estimating carbon sequestration in South West Tobago. Due to the fact that Buccoo Reef is not easy to compare to other sites because of its unique shape, the team have expanded the research to other sites including Mt Irvine and Grand Corland Bay. Coral, seagrass and mangroves are all present at these sites. This study provides an opportunity to integrate coastal issues (e.g. coastal vulnerability and resilience) into spatial planning, which is currently totally lacking. This would be an important outcome for an island state.
87. Three tools are being developed at this site:
- Mapping and modeling. ProEcoServ has undertaken a bathymetric survey of South West Tobago. The project plans to complement InVest with an alternative which is more detailed and looks at reef depth, attenuation of wave energy and coastal protection. The study will highlight the confidence (margin of error) in InVest and whether it is a valid approach based on disparity in the findings. This will be an important global outcome for the project as while InVest is widely used, the level of uncertainty inherent in the model is not explicit.
 - Scenario Analysis will look at how coastal vulnerability changes with changes in ES. The project is working with stakeholders and coastal planners.
 - Valuation – Building on a study by WRI (Burke 2008), a valuation of shoreline protection functions is proposed and of blue carbon.
88. Challenges:
- The study is likely to need 2 more years, which would take the work up to April 2015, beyond the aimed completion date of ProEcoServ of December 2014.
 - Physical data collection will be on-going over the next year. The data collection requires meters out at sea (one off-shore and one in-shore) to measure wave attenuation, which is high risk. Another issue is that the project currently does not have the required meters, and two secondhand meters would cost USD35,000.
 - In order to engage planners in the timeframe remaining, it will be necessary to present interim results to sensitise people to the outputs, pending the final outputs.
 - There is a need to influence the Executive Director of Department of Environment and Water Resources, and to gain the support of the Secretary of Community Development

Nariva

89. Nariva is the largest freshwater wetland in the Caribbean. ProEcoServ is studying the links and tradeoffs between agriculture, pollinators and their habitats. The objective is to demonstrate the reduction in income to farmers as a consequence of reduced crop yields when pollinators are excluded. The research will also link insects to the plants being pollinated in an effort to understand what pollinators like so that areas of high pollinator diversity may be created. It is proposed to use InVest to

undertaken tradeoff analysis. Scenario develop is scheduled to start in September 2013, and field work should be completed by mid 2014.

90. This is a challenging project in that data on pollinators does not currently exist in the Caribbean, and so have to be built up from scratch based on concentrated field work. Furthermore, existing studies on pollination relate to large mono-culture areas which don't exist in Trinidad and Tobago so this research has the potential to be of great use across the Caribbean. Links have also been made with a Senior Economist at US Environmental Protection Agency (EPA) who is interested in determining the marginal value of pollination, the work may therefore be of international research significance.
91. Local farmers (five) have been contracted to assist with the fieldwork. Exclusion studies are underway to estimate the percentage of output that can be attributed to pollination, which can then be given a monetary value.
92. CO₂ and methane emissions from the swamp are also being measured. In the past rice farmers drained the swamp to plant rice, which resulted in an increase in emissions. The Green Fund has committed over USD10 million for the Nariva restoration project. The area is being reforested by 120 workers from the community over 5 year. The emissions (reductions) are being measured using ground based remote sensing. It is anticipated that the emissions reductions achieved through restoration of the area can be sold.
93. Challenges:
 - The research on pollination needs to be more clearly linked to the decision making processes and be set within a policy context. There may be scope to align the work with initiatives on sustainable agriculture and local livelihoods. It is also intended to incorporate pollination as a factor in the spatial planning process.
 - Economics. The project will estimate the percentage of output that can be attributed to pollination using the change in productivity approach. If attempted, care should be taken in scaling up any of the findings from the pilot site as the pollination function between sites may differ as may markets. All assumptions should be clearly stated.

Eastern Northern Range

94. The demonstration project in the Eastern Northern Range is focused on forests in the Caura and Maracas Valley. The study is looking at soil retention and water purification functions of forests, and their links with agriculture. This study is the most advanced of the three demonstration sites, and could inform the **Hillside Regulation (development) Policy**.
95. The eUSLE is being used to determine annual erosion rates. InVest is also being used. Reliable data for the past 5 years are available from the Forestry Department. ProEcoServ have created maps showing erosion rates with and without vegetation. They will also analyse where the eroded sediment ends up. In terms of forest's water purification functions it sees that this may be not be significant at the study site as the forests are upstream of agricultural activities.
96. Work is also ongoing under the project with the **Caura community** who have a track record of community based environmental programmes and an interest in developing ES based livelihoods as a means of sustaining the community and motivating young people. The community are well organized and recently successfully implemented a Fire Guardianship (fire trail development and maintenance) project. Following on from this there is the opportunity to develop a PES project funded by the Green Fund.

97. From April-May 2013 there will be a six part workshop series to build community capacity to develop a PES project. The MP for the Caura area is the Minister of Foreign Affairs, and a champion of the Green Fund keen to promote the benefits of the people at community level.
98. Challenges:
- The focus of the economic valuation work and approaches to adopt needs to be agreed and scoped. Alternatives to the proposed replacement cost approach to estimate soil loss should be considered given that this is liable to overestimate the benefits. Floods are high on the political agenda. There have been 3-4 major flooding events along the Northern Range, where most people live, and the Ministry of Planning and Sustainable Development is committed to dealing with this issue. This offers a potential policy entry point for ProEcoServ. The possibility of estimating the damage cost of flooding could be explored.
 - Design of PES scheme: The intention is to involve the community in the design of a PES project, but additional technical supports (legal, economic) will also be required. The project also needs to be clear on what can be achieved within the next 18 months.
99. Attention needs to be paid to the scoping of the economics across the project activities, and to matching commitments to resources. The existing project economist was initially supported by a senior economist, but she left early in the project. The project is in the process of contracting another senior economist who will be responsible for the design and technical aspects of the economics work, but he will not be based in Trinidad and the Tobago. Expertise in the design of PES and national accounting will still be needed.

Vietnam

100. In Vietnam ProEcoServ have provided technical support and input for two high level strategy documents:
- **National Strategy for Environmental Protection 2020.** This National umbrella strategy was approved by the Prime Minister in 2012. The Ministry of Natural Resource and Environment (MONRE) is the focal point for co-ordinating with other Ministries. A **National Action Plan** to support the strategy is now being developed, which once approved by PM, will have to be implemented by the line Ministries.
 - **The National Green Growth Strategy** is a comprehensive strategy covering all sectors and one of the highest policy documents of the Government. The Institute for Strategy and Policy on Natural Resources and the Environment, (ISPONRE) / ProEcoServ worked very closely with the Ministry of Planning and Investment (MPI) as a drafting member for the Strategy and were responsible for ES being included in it. The Strategy's specific objectives include the environmental remediation and rehabilitation of degraded areas and a reduction in natural resource degradation and depletion levels. The Director of ISPONRE is a member of Green Growth Strategy Board. The strategy provides a framework for other sectors. The priority now is to prepare an action plan.
101. The Ministry of Planning and Investment (MPI) has also developed a strategy on sustainable development and MONRE a National Climate Change Strategy. Furthermore, a party resolution to respond to climate change, natural resources management and environmental protection was approved by Party Central Committee on 3 June 2013. Furthermore, a party resolution is due to be submitted in May 2013 on climate change adaptation. This is the highest level agreement that then guides the development of laws and strategies. If the resolution is adopted then there will be a degree/law issued by National Assembly to realize it. The ES approach is incorporated in this resolution.

102. **Green Accounting:** The General Statistics Office under MPI is very interested in preparing Green Accounts but needs help in terms of data and theory to calculate green GDP. Vietnam is not one of WAVES's pilot countries, but a Dfid trust fund is financing a WAVES Phase 1 program in Vietnam, which will run to mid 2014 and is being executed by the World Bank. This is being co-ordinated by ISPONRE. The intention is to start with a forestry account. There is a lot of data at the Ministry of Agriculture and Rural Development (MARD) and MONRE but different classifications of land use and forests are being used. The World Bank project aims to rationalize the data sources and promote data sharing. This will build on an Information Management System (FORMIS) million funded by EU. It is hoped that the outputs of ProEcoServ will provide an example for developing green accounting in other pilot provinces in Vietnam. There are other donors supporting activities in this area including: WAVES who are undertaking a pilot study, Statistics Netherlands who are considering funding a mineral accounts, KfW (forestry), ADB, WWF, and JICA. The MPI has a draft green GDP road map and WAVES want to update this and see how it all fits together, and how donors can help. The project team has suggested establishing a link between ProEcoServ and WAVES initiatives through a global agreement between UNEP and the WB.

Ca Mau Demonstration site

103. It is understood that the results of the demonstration study in Ca Mau Province will feed into – Land Use Planning (including investments), conservation planning and EIA. Decision support tools being developed include – ES maps, spatial analysis of drivers, tradeoff analysis, scenario analysis and valuation.
104. The pilot study in Ca Mau can serve as a demonstration of how to translate the approved national strategy and policies into action. There are 64 provinces in Viet Nam, with decision making authority, so their awareness and understanding of mainstreaming approaches and tools is important. The study is also considered to be highly relevant and timely given that Ca Mau's ecological assets have not yet been over developed and are of significant ecological potential. The study area includes Ca Mau National park, which was designated as a Ramsar site in 2012.
105. The study will look at the difference in land use between 2005 and 2010 and analyze the impact on ES associated different levels of development. GIS mapping has been undertaken using InVest. It proposed to use three InVest models - carbon storage, coastal vulnerability and coastal protection.
106. There are four people in GIS team working with an officer in the Department of Natural Resources and Environment (DONRE) to collect data. The lead GIS consultant has a background in remote sensing and GIS, and has been working closely with the InVest team in Washington DC to understand and refine the marine and carbon sequestration models for Ca Mau. This included a 2 day face to face meeting in Hanoi. There is also a consultant responsible for the economic valuation of ES and another consultant looking at scenarios. The scenarios will be based on the Government's land use plan 2010-20 and a biodiversity development scenario. The proposed valuation approaches are understood to be market pricing approach, cost-based approach and the travel cost method. This is an area which is likely to need more technical support.
107. The spatial database is complete and spatial maps are available. Data provided by MONRE / DONRE have been combined with satellite imagery, and global data has been used to fill in data gaps – e.g. for wave height and wind direction / speed. For certain trees, carbon data is based on IPPC default values. Data on mangroves is from Vietnam.
108. To date there have been 3 workshops/training in Ca Mau to:
- identify the scope of study and opportunities to integrate ecological services.
 - present the results of spatial modeling and reiterated opportunities for integration.
 - Training on application of InVest tools for mapping of ecosystem services in Ca Mau

109. DONRE chairs the work at the provincial level. Their main involvement to date has been the provision of data and co-ordination. They would like to be more closely involved in the project and to be provided with more training so that they understand the tool and can interpret the spatial maps.

110. Challenges:

- **Awareness raising at national level:** ES are a new concept for the country and therefore it has been difficult to fully understand. However to get Government approval, understanding among decision makers is necessary. At the national level MONRE and MARD staff understand the concepts, but other Ministries are still not bought in. Processes are therefore needed to influence other Ministries. MONRE and MPI are the two key ministries, but it is also important to influence the Ministry of Finance (MOF) and MARD.
- **Awareness raising at provincial level:** Among key stakeholders (e.g. Department of Forestry, Office of Peoples Committee, and National Parks Authority) there is a low awareness and understanding of the project. The project is considered academic and the goals and expected outcomes are not understood. The Provincial Co-ordinator from DONRE does have a reasonable understanding of the project and if he was more closely involved in the details of the project could be more effective in disseminating to others. A workshop was held to present the coastal vulnerability maps to provincial authorities, but it was very difficult for them to understand the map. There was also a two day training workshop on InVest in Ca Mau – but the participants did not have a background in this area and felt that they achieved almost nothing from it. They don't understand the inputs to the model, how the maps are generated and what they stand for. As a result there is a lack of appreciation as to how the tools may be used to inform decisions or policy. There is a strong interest in payments for ecosystem services within the province and a misunderstanding that ProEcoServ will be providing a tool specifically to calculate such payments. For example, how to derive payments for coastal services such as natural disaster protection, or mechanisms for shrimp farmers to pay for the environmental services provided by forest. Without an increased awareness and understanding of the tool, uptake of the tool by decision makers at the provincial level is unlikely to be successful.
- **Linking tools to policy.** Decision makers at the provincial level are not clear how the InVest model will be used. Their intention is to wait until the final results are verified by a competent agency before coming up with relevant proposals for the province. It would be better for decision makers to be understanding and exploring these links now and this requires an understanding of the model.
- **Accessibility / suitability of models developed:** Of concern to the Provincial Government is that the tools will be too academic and not suitable for Ca Mau. There is a sense that the project is being conducted as a research project as most of the activities are being conducted in Hanoi as this is where the technical team is based.
- **Co-ordination and interaction between ISPONRE, Technical team and Provincial Government.** Ca Mau is Vietnam's southern most province and only accessible by air from Hanoi via Ho Chi Minh City. Travel time and cost is therefore a factor although a greater presence in the province by the technical team would be very beneficial. The teams do communicate via internet and telephone, but more face to face interaction is required to communicate the project in detail given its complexities. In terms of reporting output the province should be consulted at each stage.
- **Technical support:** The team needs more support to map trade-offs, undertake the scenario analysis and for the economic valuation. It was envisaged at the design phase that additional technical support would be needed in Vietnam, and this was specified in the Global Project manager's TOR, as drafted in Appendix 11 of the Project Document (but not in the published TOR).

- **Timing.** It took Vietnam roughly one year to really understand the approach, and they feel that they would benefit from a project extension to April 2015. This would give them more time to disseminate the tools and ensure their uptake. Time will be needed to understand how the valuation results can be used and to build confidence in the findings among decision makers.

Global Level / Science & Policy Interface

111. The key objective of component 3 is to make ProEcoServ visible, and the project is being quite effective in this respect.
112. Communications / Dissemination initiative include:
- Global Communications Strategy
 - A project Website, which helps teams to share information. Visits to this are monitored and are increasing. In 2012 access from Trinidad & Tobago was very high demonstrating that events can promote interest.
 - Global newsletter. There have been two editions so far, the first one focused on what the project is doing and the second on the country outputs
 - An ES Talk podcast has recently been introduced and two talks are available on the website. The talks have started with global steering committee (SC) members, and the intention is that future interviews will be undertaken with key policy makers in the pilot countries
 - Social media tools – LinkedIn, facebook, twitter, mailing lists
 - The project activities and organized events are shared with relevant initiatives, and mailing lists (e.g. TEEB, Bio-econ network, IISD) to increase the visibility of the project. The second SC meeting was announced in the WAVES newsletter
 - Project flyers, banner, fact sheet, and folders.
113. The half yearly progress reports provide an inventory of meetings and the number of participants. Examples of international meetings attended by ProEcoServ are provided below:
114. 2011:
- The ProEcoServ inception workshop was held in Nairobi from 06-11 June 2011. It brought together all four national project coordinators, other national support personnel, the staff from UNEP DEPI-ESE as the executing agency, as well as a broad range of international resource persons, and the project managers of four other GEF-funded projects with a focus on ecosystem services. In addition, a two-day training session on InVEST was given by the Stanford University's Natural Capital Programme, to provide the national teams with a set of ecosystem services valuation tools that are readily applicable at national and local scales.
 - The Trinidad and Tobago and South Africa team members participated in the SGA meeting that was held on 12-16 December 2011 in Bilbao, Spain.
 - The Vietnamese team participated in workshop on climate change and wetlands conducted by CRES and delivered a presentation on ProEcoServ on 8th December 2011 in Hanoi, Vietnam. The team also participated in the workshop "Investing in Natural Capital for Green Economy" and delivered a presentation on approach for mainstreaming of ecosystem services.

115. 2012:

- A discussion session about ProEcoServ was held in The Economics of Ecosystems and Biodiversity (TEEB) Conference in Germany 19-22 March 2012, (All countries). On 22 March 2012, a Special Session on “Mainstreaming of Ecosystem Services: Possible Pathways and Lessons Learned’ was organized with the ProEcoServ country team. The overall objective of the session was to exchange know-how on mainstreaming ecosystem assessment into development planning.
- Following the first steering committee meeting in May 2012, an international workshop on mainstreaming ecosystem services into development policy was held in Trinidad and Tobago. This was an international event including participants and resource persons from UNEP-UNDP Poverty- Environment Facility, University of Trento, Italy, Dartmouth College, USA, Bhim Rao Ambedkar College, Delhi University, India, UNEP Regional Office for Latin America and the Caribbean, The Mediterranean Science Commission, US Environmental Protection Agency, USA, University of Minnesota, USA, Globe International, UK, World Resources Institute, USA, World Wildlife Fund, USA. A survey following the workshop found that 97% of participants felt that the workshop content was important to their jobs and 98% stated that the presentations and discussions helped them to understand the topic.
- UNEP’s organized a side event on “Natural Capital and Economic Development: Bridging or Breaking?” in Rio+20, Sustainable Development Conference, in Rio, Brazil on 18 June 2012 at UNEP Pavilion. The session was chaired by Pushpam Kumar, Chief of ESE Unit, UNEP. The event showcased how ecosystem services can be integrated within conventional development planning and processes, using examples from Trinidad and Tobago (integrating ES in nationwide land use planning and into national accounts), and Vietnam (valuation of mangroves’ importance in national economy). This was a well attended event, with a number of ministers in the audience

116. These and other events have served to strengthen the networks of scientists and policy makers interested in the topics

117. UNEP’s Regional offices, LifeWeb Project, GEF’s Danube PES Project, OECD’s biodiversity and ecosystem services activities, UNEP/UNDP PEI, WAVES, UNstat, UK ESPA, EU Environmental Agency, GLOBE, etc. are some of the initiatives that have been contacted and involved in project workshops and trainings. ProEcoServ has developed a very strong relationship with WAVES and the two initiatives plan to have some joint meetings in the future.

2.1.1.2 Outcomes

118. This section analyses how the activities and outputs undertaken by the project have contributed to the achievement of the expected project outcomes.

119. Outcome 1.1 Decision & policy makers have access to strengthen capacity and advisory services to analyze how decisions affect selected bundles of ecosystem services, incorporating resilience, risk and uncertainty factors. This outcome will be measured by the uptake of the tools that are being developed under ProEcoServ. While interest in these tools is high in all the pilot countries, uptake will depend on to what extent decision makers understand the tool and find them credible.

120. *Outcome 1.2: Improved understanding in international fora of the potential development ES financial mechanisms.* Trinidad and Tobago is the only country looking at a PES scheme, which could evolve into a PES portfolio approach of international interest based on the involvement of the Green Fund. This outcome is not applicable to the other pilot countries.

121. The project has already had some successes under component 2 – Policy Environment. *Outcome 2.1: Increased awareness & involvement in ES management in pilot countries.* The level of awareness among decision makers has increased in all four counties and there is a good level of participation in

project governance (e.g. Ministry of Environment in Chile, Department of Environmental Affairs in South Africa, Ministry of Planning and Sustainable Development and Green Fund in Trinidad and Tobago and ISPONRE in Vietnam). Before the project there was very little understanding of ES and natural capital in Vietnam or Chile. ProEcoServ is viewed as the first project really working on ES and is very important in terms of introducing this new area in these countries.

122. *Outcome 2.2: Ecosystem services are considered for integration into socio-economic, political and legal instruments.* ProEcoServ has already successfully integrated ES into National level strategy documents in Trinidad and Tobago, Vietnam and South Africa and further successes are anticipated in this area (e.g. The National Spatial Planning Strategy in Trinidad and Tobago)
123. *Outcome 3.1- Increased policy relevance of ecosystem services science' results in international BD & ES related processes.* The project has developed strong links with other international initiative such as WAVES. These international institutions are very supportive of the work of ProEcoServ and it is hoped that the quality of the project's outputs will lead to further international recognition and to replication.
124. Table 3 provides a summary of achievements towards expected project outcomes.

Table 3: Summary of progress towards achievement of expected project outcomes

Outcome	Indicator	Progress
<p>Component 1: Policy Support Tools</p> <p>Decision & policy makers have access to strengthen capacity and advisory services to analyse how decisions affect selected bundles of ecosystem services, incorporating resilience, risk and uncertainty factors.</p> <p>1.2: Improved understanding in international fora of the potential development ES financial mechanisms</p>	<p>Number of participating entities integrating tool in their decision making process</p> <p>Number of decision makers using scenario planning</p> <p>Scoping papers produced increase interest in new mechanism.</p>	<p>General: Tools are still at development stage but interest from Government and Stakeholders in tools being developed is generally very high</p> <p>Chile & Vietnam: Strong interest in tools being developed but uptake threatened by ineffective engagement with decisions makers to date at the provincials / municipal scale</p> <p>South Africa: Strong interest in tools being developed but concerted effort needs to ensure their implementation</p> <p>Trinidad & Tobago: The National Spatial Development Plan presents a promising opportunity for ProEcoServ. Specification of additional decision entities to be targeted through pilot studies required</p>
<p>Component 2: Policy Environment</p> <p>2.1: Increased awareness & involvement in ES management in pilot countries</p> <p>2.2: Ecosystem services are considered for integration into socio-economic, political and legal instruments</p>	<p>Levels of awareness of decision makers on ES in the four countries</p> <p>Level of participation in project governance</p> <p>The ES concept is included in documents informing relevant official instruments in the four pilots</p>	<p>General: The project has already had some successes in this area</p>
<p>Component 3: Science-policy interface</p> <p>3.1 Increased policy relevance of ecosystem services science' results in international BD & ES related processes</p>	<p>Number of international processes acknowledging the contribution of ProEcoServ</p>	<p>Strong links with WAVES</p> <p>Good reception at international meetings</p>

2.1.2 A2: Relevance

126. This part of the evaluation assesses, in retrospect, whether the project's objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP mandate and policies at the time of design and implementation.

127. ProEcoServ seeks to address an identified global need for better and more integration of available scientific and socio-economic information on ecosystems into policy actions. It is building on the SGAs in the pilot countries and is therefore closely aligned with the sub-regional environmental issues and highly relevant in the target countries. In many countries there is a view that the timing is right for this kind of thinking as there is growing awareness of the importance of ecosystem services.
128. ProEcoServ was *highly* consistent with UNEP's mandate when designed and continues to be so. Ecosystem management is one of UNEP's six Priority Areas.⁶ Under UNEPs' Medium-term Strategy 2010-2013 the objective of the **ecosystem management** priority area is that: countries utilize the ecosystem approach to enhance human well-being. Expected accomplishments are: (a) Countries and regions increasingly integrate an ecosystem management approach into development and planning processes; (b) Countries and regions have capacity to utilize ecosystem management tools; (c) Countries and regions begin to realign their environmental programmes and financing to address degradation of selected priority ecosystem services
129. UNEP's sub program on Ecosystem Management is working with Governments to rehabilitate ecosystems and has around 30 projects worldwide. ProEcoServ will provide data, arguments and tested processes for mainstreaming that the sub program can use to strengthen their approach.
130. ProEcoServ is fully in line with the long-term objective 2 of the GEF's biodiversity focal area strategy - to mainstream biodiversity in production landscapes/seascapes and sectors. It is also compliant with the strategic priorities 4 (Strengthening the policy and regulatory framework for mainstreaming biodiversity) and 5 (Fostering markets for biodiversity goods and services).

2.1.3 A3. Efficiency

131. The project started slowly and while it has picked up over the last year, implementation is still behind schedule. A further reason for delays is that in Vietnam a significant lead time was required to actually understand the concept of ES, and in Chile a change in the executing agency post project design resulted in a slower start up. A project extension to 31 December 2014 was agreed at the Second Steering Group Meeting in Chile. However, this may still be very challenging for some countries – Vietnam and Chile in particular, and potentially for certain components of the Trinidad and Tobago program if problems are encountered in terms of data collection within the demonstration sites.
132. The project teams have all attempted to build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects to increase project efficiency.
133. In fact the project was specifically designed to build on existing work undertaken for the SGA. This was to allow the pilot countries the best chance of integrating the tools into decision making given the lead time that is associated with data collection and building relationships with decision makers. For example, as stated in the Project Document in **Trinidad and Tobago** the project design capitalized on a number of existing initiatives including⁷:
 - The Cropper Foundation (TCF) and The University of the West Indies (UWI) were the lead organisations for both the Northern Range and Caribbean Sea Assessment MA SAGs, and have been involved in follow up initiatives

⁶ UNEPs' priority areas are climate change, disasters and conflicts, environmental governance, ecosystem management, harmful substances and hazardous waste, resource efficiency.

⁷ Similar information is provided for the other pilot countries in the Project Document.

- The Environmental Management Authority (EMA) and the University of the West Indies initiated a project in the Nariva swamp area in Trinidad focussed on mapping greenhouse gases and reforestation efforts.
 - The Sustainable Economic Development Unit (SEDU) and the Caribbean Natural Resources Institute (CANARI) have completed studies on Payment for Ecosystem Services (PES) throughout the Caribbean region
 - The University of the West Indies, through the Herbarium and in collaboration with the University of Oxford has undertaken a full floristic study of Trinidad and Tobago
 - The Institute of Marine Affairs (in collaboration with UNEP) and The Cropper Foundation have initiated work within key Northern Range watersheds, and these would serve to provide technical inputs into the project
 - The Buccoo Reef Trust (BRT) has for several years been undertaking work on the Buccoo Reef of Tobago. Along with the Tobago House of Assembly, the BRT has been leading one of the demonstration projects under the GEF-Integrating Watershed and Coastal Area Management (GEF-IWCAM) initiative in Tobago
 - Trinidad and Tobago Green Fund (GF) for reforestation and remediation projects: At project design phase the Green Fund expressed a specific interest to develop and implement a pilot pro-poor Payment for Ecosystem Services scheme as a complement to ProEcoServ, and approved (Feb 2010) a USD 10 million project to restore the Nariva Swamp, which has strong synergies with ProEcoServ.
134. In **Chile** it was mentioned that there exists the opportunity to build synergies with other GEF projects in Chile such as the Forest Stewardship Council project.
135. In **South Africa** the project's implementation approach is based on building on existing data and projects, such that the focus can be on understanding the processes for mainstreaming
136. In **Vietnam** there are many projects nationally working on the same initiatives, which ProEcoServ is collaborating with and which should facilitate learning and efficiency. For example they are working with WWF, who have an ecosystem project in Ben Tre province and who intend to adopt the same approach as in Ca Mau. They are also working with World Bank to bring natural capital into the accounting system.
137. Globally there are many synergies with other initiatives, which the project can both learn from and in due course inform as the results of ProEcoServ start to crystalize. These include: TEEB and WAVES. Potential linkages between ongoing UNEP initiatives and ProEcoServ include:
- ESE-related projects (Inclusive Wealth Report initiative, ecosystem accounting, Food security project in India & Uganda; Valuation of forestry with UN-REDD; Valuation of Sudd wetlands in South Sudan etc.);
 - International Platform for Biodiversity and Ecosystem Services (IPBES) under UNEP's DEPI Biodiversity Unit. Furthermore CSIR and Cropper Foundation are involved in IPBES strengthening the links to ProEcoServ at the country level.
 - UNDP-UNEP Poverty-Environment Initiative (PEI)
 - Global Legislators Organisation for a Balanced Environment (GLOBE)

2.1.4 Summary of ROtI analysis

138. Driving this project is the real need to link the production of good scientific and economic analysis to targeted policy processes. This ‘mainstreaming’ requires not only best practice tools, suitable for the given local conditions, but also an understanding of the process of decision making and strategic windows of opportunity for influencing decisions.
139. Success of the project will be largely measured by the extent the technical tools being developed are used by decision makers, and their potential replication at other sites. This is not an easy result to achieve within four years, especially for countries starting from a low level of awareness of ES not only at the policy level, but within technical teams, and where research and data activities are being undertaken to populate the tools.
140. It is too early at this mid-term stage identify changes/results linked to project implementation, but some achievements are already evident. These include (i) the project has contributed to the establishment and consolidation of a network of ES practitioners worldwide, and to global and national level dialogue on the inclusion of ES considerations in national planning. (ii) In Vietnam, South Africa and Trinidad and Tobago ProEcoServ has been instrumental in getting ES included in key national level policies and strategy documents; (iii) In South Africa the project has been successful in developing spatial maps of ecosystem services, an area considered to be in its infancy in South Africa and where credible science based maps are needed. These have already been used by the Mpumalanga Tourism and Parks Agency to inform land use planning; (iv) In Trinidad & Tobago the project team is fully engaged in enshrining ES concepts in the next national development planning process.
141. The capacities of institutions vary and local contexts present specific challenges to the achievement of project objectives at the local and national level. In Vietnam and Chile the capacity is lower and time was needed to grasp key concepts. For example, ES is a new area for Chile and the MOE is only 2 years old. Therefore the project is facing a steep learning curve and this has to be built into the expectations on project delivery. Vietnam and Chile are working at the Provincial and Municipal levels respectively where resources need to be diverted in the remaining time towards building awareness and understanding of the tools among future users. The fact that countries are starting from different points in the mainstreaming process, should be taken into consideration as to what can be achieved within a four year project,
142. Table 4 summarizes the ROtl analysis for the project.
143. Outcomes are rated on a scale A-D. At this mid-term stage the project has been rated as B – ‘Outcome plus implicit forward linkages’. This means that the outcomes were achieved and that there are implicit forward linkages to intermediary stages and impacts. While not all outputs have been achieved at the mid-term stage, the evaluation is based on the achievements to date and the activities in place to move towards the intermediate states.
144. Intermediary stages are rated as C – the measures to move towards intermediate states have started, but have not produced result, barriers and/or unmet assumptions still exist, which need to be overcome in the next 18 months.

Table 4: Results Rating of Project

Results rating of project	Strengthening National and Institutional Capacities for Mainstreaming Multilateral Environmental
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entitled:	Agreements (MEAS) into National Poverty Reduction Strategies						
Outputs	Outcomes	Rating (D – A)	Intermediary	Rating (D – A)	Impact (GEBs)	Rating (+)	Overall
Policy support tools	Decision & Policy makers have access to better capacity and advisory services Improved understanding in international fora of the potential development ES financial mechanisms	B	1 Development of best practice policy tools suitable for pilot studies and for replication	C	Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making		
Policy environment	Increased awareness & involvement in ES management in pilot countries Mainstreaming into socio-economic, political and legal instruments		2 Successful mainstreaming ‘uptake’ of ES assessments in the four pilot countries				
Science Policy Interface	Increases policy relevance of ES sciences’ results in international processes		3. Requests for ProEcoServ tools and practices				

2.1.5 B: Sustainability

145. The aim of the project is to develop tools that can be used on a going bases to facilitate decisions. For these decision support tools to be sustainable they need to be suitable for the context in which they will be applied, people need to be trained in how to use them and decision makers need to have a clear understanding of the functionality and outputs of the tools. There is therefore a distinction between those that will use the tools to generate the outputs and those that will primarily use the outputs of the tools to formulate policies, strategies or legislation.
146. According to the project document, the proposed ProEcoServ strategy and planned interventions in themselves incorporate important factors to maintain the sustainability of the outputs, outcomes and impacts after the project has concluded. These factors include: The development and pilot implementation of tools and planning models that are applicable at various scales and replicable beyond the pilot project areas; the development of capacities at all levels including marginalised sectors of civil society and the government; the overcoming of key barriers to mainstream ecosystem management and ecosystem services approaches into national development planning frameworks and regulatory instruments.

2.1.5.1 B1: Financial sustainability

147. This sub section assesses the extent to which the continuation of project results and outputs (e.g. tools) and the eventual impact of the project are dependent on continued financial support, and the likelihood of adequate financial resources becoming available.
148. The Project Document suggests that the mainstreaming costs will be offset by PES and the expected mitigation effects on regulative ecosystem services such as water purification, waste absorption, natural hazard mitigation or carbon capture and sink services. This assumes that PES system can be successfully established, and that savings can be convincingly demonstrated. There was also the expectation that ProEcoServ would foster public-private partnerships and sustainable business initiatives for SMEs to become engaged in ecosystem management and to incorporate pro-environment and pro-poor business strategies. In **CHILE**, for example, it is expected that project activities would be developed around ecotourism. Work with the private sector has been limited to date, with the exception of South Africa, and it is not clear that this should be a focus of the work over the next eighteen months given the other priorities that the countries have to focus on. A scoping of sustainable financing options would be a useful output, but not envisaged under the project. It is therefore unclear as to how continuing development and use of the tools by decision makers will be sustained post the project, and is clearly partly contingent on credible and supported tools and processes being developed. If the tools are well developed and accepted by policy makers, additional financial support may not be required. However it is likely that further refinement of the tools and approaches would be beneficial.
149. The most promising route for financial sustainability is in **TRINIDAD AND TOBAGO** through the Green Fund, which has expressed a special interest in the Payment for Ecosystem Services approach. Onward funding from WAVES may also be available to support ProEcoServ green national accounting opportunities.

2.1.5.2 B2: Socio-political

150. At present the level of ownership among key stakeholders and targeted users of the tools is insufficient to have confidence in the project's results being sustained in Chile & Vietnam. In Vietnam, while Government commitment is high at the National level, at the provincial level a low level of understanding of the tools and their uses is evident. In Chile, The Regional Government in Antofagasta and the Municipality and communities in San Pedro de Atacama do not have a sufficient level of ownership in the project. They do not understand the models being developed and what their functionality could be. In both cases this represents a significant risk to project success.
151. ProEcoServ South Africa was launched by the Director General: Department of Environmental Affairs, Ms. Nosipho Ngcaba, in Pretoria on the 17th of October. Over the project CSIR has strengthened its partnership with South Africa's National Biodiversity Institute. They are formally involved in managing and implementing most of project component 2. Moreover, the partnership with Department of Environment Affairs has been strengthened and a new initiative of developing an SA-TEEB study has been in progress. Through CSIR's partnership with SANBI, the team has secured new sources of co-funding from SWEDBIO to support developing ecosystem service indicators for Y2 and Y3. A new proposal to the EU Framework program for co-funding of some of the work in the Eden District study area has also been submitted.
152. The level of ownership in the proposed PES schemes and the National Spatial Plan is high in Trinidad and Tobago. However, relationships need to be built with the Ministry of Finance and the CSO if Green National accounting work is to be pursued. Other Ministries and departments may also need to be brought more into the project depending on the additional policies to be targeted through the demonstration sites.

2.1.5.3 B3: Institutional factors

153. One of the projects objectives is to integrate ecosystem services into government processes, policies, sub-regional agreements, legal and accounting frameworks. In some of the countries the national level strategies and policies provide enough of a platform for the specific work being undertaken by ProEcoServ. In Vietnam ISPONRE are a Government agency attached to MONRE, so the project has a direct link to Government. ProEcoServ has been instrumental in developing national level strategies as discussed in section 2.1.1. In South Africa policies and legal frameworks are well developed and the challenge is now to implement these polices, which ProEcoServ is well placed to assist with. In Trinidad and Tobago Government commitment is high and the project is anticipating the successful integration of ecosystem services into the National Spatial Plan at the request of the Ministry of Planning and Sustainable Development. A discussed above the CSO will need considerable support and capacity building if it is to lead on Green Accounting in Trinidad and Tobago. A legislative review in Chile revealed that there are no regulations directly supporting ecosystem services, so the institutional frameworks are less developed and supportive of ES in Chile⁸. One of the rationales for working at the municipal scale is that it may be easier to influence the legal system at this level.
154. Table 5 summarizes the key focal points in Government and comments on their level of commitment.

⁸ However Chile subscribes to the Millennium Development Targets, is a signatory to key international conventions and environmental treaties (e.g. the Johannesburg Execution Plan), and as a member of the Organisation for Economic Cooperation and Development (OECD), supports the concept of green development.

Table 5: ProEcoServ – key Government focal points

Country	Main focal points	Level of Commitment
Chile	Ministry of Environment	High of support and involvement
	DGA	High level of interest but need to be included in development of Mass Water Balance Model
	Municipality of San Pedro de Atacama	High level of interest and want to be more integrated into project
South Africa	SANBI	Leading on component 2
	Department of Environmental Affairs	High and have used ProEcoServ in national work as well as IPBES
	Eden District Disaster Management	High level of support to demonstration in Eden District and engage in deliverable development
	Department of Water Affairs	High – have used project deliverables in new policy
Trinidad & Tobago	Ministry of Planning and Sustainable development	High, have called the project their own
	Ministry of Environment	Permanent Secretary is a champion of the project and relationship with Ministry is developing Commitment of the Green Fund, is extremely high
	Ministry of Finance	Engagement at an early stage and important for the Green Accounting agenda
Vietnam	ISPONRE	High, ISPONRE is attached to MONRE
	DONRE	Department recognise important of project but need more support
	Ministry of Planning and Investment	High level of interest and involvement in project activities

155. In Trinidad and Tobago there has been limited engagement to date with the Ministry of Finance and the National Statistics Office, but this is improving. The project held an initial meeting with the Minister of Finance 18th March 2013, on the back of which the Minister has requested a technical meeting in the Ministry. The project is also seeking to strengthen its relationships with the Ministry of Environment and Water Resources. As an important step in this direction, the Permanent Secretary of the Ministry of Environment and Water Resources, was nominated as the chair of the national steering committee at the last committee meeting in April 2013. A meeting is also being sought with the Minister.

2.1.5.4 B4: Environmental

156. Due to the large geographical scale of the project it has not been possible to assess the influence of environmental factors on the future flow of project benefits. Generally however climate change raises the urgency for the development of reliable decision making tools which incorporate ecosystem services and can analysis scenarios.

2.1.6 C: Catalytic role and replication

2.1.6.1 Catalytic role

157. It is hoped that ProEcoServ will have a catalytic effect both in the pilot countries and internationally. This can only be properly assessed when the tools have been finalized and mainstreamed. In Trinidad & Tobago ProEcoServ has already catalyzed other activities, by promoting study of Caroni Swamp, which has secured a grant of 950,000 TT\$ to undertake ecosystem services valuation. In South Africa, the project has catalyzed further work and funding e.g. WWF (SA) are taking forward the maps of water source areas in raising awareness about water ecosystems and their services.
158. The project has a number of champions namely: The Green Fund in Trinidad and Tobago; the Ministry of Planning and Sustainable Development and the Permanent Secretary at the Ministry of Environment. Ms Nguyen Dieu Trinh at the MPI in Vietnam who is a strong proponent for the ProEcoServ, Mr Thenoux at the Ministry of Environment in Chile, and, the Deputy Director General of Environment Affairs in South Africa (who is also a bureau member of IPBES). These champions can promote the project, but developing a broad based support is also key to the sustainability of the outputs.

2.1.6.2 Replication approach

159. To date the project has not put much emphasis on defining the replication opportunities that may flow from the project. This is an area that can be developed over the coming 6-12 months. In order for the ProEcoServ tools to be replicable it is important that they adhere to international best practice. However it is not only the tools that can be replicated from the ProEcoServ project, but importantly the mainstreaming processes. In order for this to be possible it is necessary for the countries to start documenting this mainstreaming process, including the steps, lessons learnt and contributing factors (positive and negative). South Africa's intention to undertake an assessment of their mainstreaming processes in the last year of the project should make an important contribution to defining the replicability of the project's outputs.
160. UNEP's South-South Co-operation Exchange Mechanism is one possible mechanism for promoting ProEcoServ outputs. This is an online mechanism where South-South exchanges can be shared. For each project a description is provided on what was done and how it can be replicated. The outputs need to demonstrate a strong result with a high level certainty.

2.2 Processes Affecting Attainment of Project Results

2.2.1 D: Stakeholder participation/ public awareness

Stakeholder participation

161. According to the Project Document stakeholders were engaged in the project design phase, and implementation arrangements were carefully considered. In addition the project was able to secure the involvement of key partners in all of the pilot countries.
162. At the outset of the project preparation in **Chile**, the work team proposed the creation of an advisory committee as a forum to: (i) Provide and share information, knowledge and experience between the members; (ii) Express and integrate different perspectives and interests; (iii) Generate trust and dialogue between relevant stakeholders; and (iv) Move beyond institutional and organisational boundaries. The creation of this project advisory committee proved to be the central axis of the assessment process, offering a space for governance to the seventeen participating representatives from the different user groups: the Atacameño community, the public sector, local government, tourism operators, mining companies and inhabitants of the municipality

163. In South Africa extensive stakeholder consultations were undertaken to identify awareness gaps and inconsistencies, stakeholder needs, opportunities and constraints for using ecosystem services in decision making and policy processes and to ensure buy in into the project itself.
164. In Trinidad and Tobago the national executing agencies (The University of the West Indies, The Cropper Foundation and the Buccoo Reef Trust) began engaging a range of relevant stakeholders including public agencies, research institutions, non-governmental organisations (NGOs) and a range of communities and community-based organisations (CBOs) throughout the country. Two stakeholder consultations – one in Trinidad and the other in Tobago - were held and were geared at receiving feedback on stakeholder interest, project scope, and commitment of stakeholders to become involved in the project. Both consultations, as well as follow-up discussions with individual stakeholders, indicated wide stakeholder interest and were important for fine-tuning the project scope and gaining commitment for tasks.
165. In Vietnam stakeholder consultations were conducted as a starting point for the stakeholder mapping and analysis was the existing legislative framework regulating the roles and responsibility of state government on wetland management in general and the environmental service in particular. In addition, a number of research institutions and NGOs are also working in this field.
166. Since implementation, the team in **Chile** has been interacting with The Ministry of Environment, DGA, SENATAUR, Municipality of San Pedro de Atacama, the Atacamenos communities and the Mining companies. As discussed the engagement with the local communities has not been effective to date due to the difficulties in communicating complex terms to indigenous communities in a language that they can relate to and the distance and limited presence of the technical team at the project site. More interaction is required with the end users of the tools – DGA, the Municipality of San Pedro and SENATAUR, and it is important that a core group of technicians within these organisations are trained to use the tools.
167. An initial workshop was held in June 2012 as a first step to understand stakeholder views. Since then there have been three meetings in San Pedro de Atacama and one in Antofagasta. However, difficulties have been experienced in gathering people and securing continuity of attendance at workshops.
168. In South Africa the project has held extensive stakeholder meetings, in some cases building on existing stakeholder forums. They have also undertaken a baseline assessment of stakeholder groups for 2 of the mainstreaming approaches (communication and disaster management).
169. In Trinidad & Tobago the intention is to have stakeholder workshops at each site. A series of three workshops is envisaged: workshop 1 will involve a fieldtrip / questionnaire on the site; workshop 2 provides feedback on the questionnaire used at the first workshop and includes a visioning exercise; and workshop 3 involves scenario building. There could then be a final workshop to assess knowledge, attitudes and practices and determine if any changes have occurred, although a baseline of the attitudes of policy makers and stakeholders has not been systematically collected. The evaluator attended the second workshop in Buccoo reef, and although interest in the sustainable management of the area and the tools being developed was high, it was not clear what the final output of the workshop series would be and how this would feed into the mainstreaming objective of ProEcoServ. This is important to manage the expectations of the participant and a clearer idea of what policies were being targeted would enable the project to focus on building awareness with the key decision makers in Tobago, which does not appear to have happened as yet. In the Northern Range it is proposed to have a series of meetings to develop a PES mechanism, again this work should be carefully scoped so that the project is clear on all the components needed to define a PES system and the community's role in this. Generally good working relationships have been built with the communities at the three demonstration sites.

170. In Vietnam workshops have been held with Provincial government in Ca Mau, but capacity building and training initiatives have not been successful to date. A more intensive training programme is needed along with a greater presence in the province

Public awareness activities

171. Various public awareness activities have been undertaken by the project teams and at the global level. Some examples of past and planned activities are provided below.
172. In Chile a series of television, radio interviews and newspapers reports were used to communicate the project to the general public when it was launched. In **South Africa ProEcoServ** made it onto the front page of an engineering newspaper, as well as into a national newspaper – Business Day. In **Trinidad & Tobago** there were a series of media articles following the inception workshop and there has been some TV coverage. A media person from Tobago Voice attended the second stakeholder workshop. A media series is planned in one of the papers (5-6 articles). In Vietnam a photographic competition is planned in Ca Mau province to help spread the news of the project and help people better understand the areas important ecosystem services. Mass media campaigns are also planned.

2.2.2 E: Country Ownership and Drivenness

173. In general country ownership and drivenness is high across the pilot countries at the National Government level, but needs further development at the Provincial levels (Chile and Vietnam), and among stakeholders..
174. The Ministry of Environment is very closely engaged in the project in **Chile**, and has hired a full time co-ordinator, who is providing a link between the technical teams and the communities in San Pedro de Atacama and has facilitated the collection of data. The Undersecretary of the Ministry of Environment, Chile provided a key note address at the Second National Steering Group Meeting. While the Mayor of SPA heads the National Steering Committee, the municipality requested to be more closely involved in the project implementation. The communities in SPA, whose ownership in the project is very important for its success, requires strengthening.
175. In South Africa there is a strong relationship between CSIR (the project lead) SANBI and the Department of Environmental Affairs, who in turn support engagement with development planning and disaster management sectors. At a local level there is also a strong relationship between team members from the CSIR and local management authorities
176. In Trinidad & Tobago, ProEcoServ has a solid relationship with the Ministry of Planning and Sustainable Development, who have claimed the project as their own. The MPI's report 'Working for Sustainable Development in Trinidad and Tobago (June 2012) states: 'The ProEcoServ programme, a new initiative of the Government of Trinidad and Tobago in collaboration with the University of the West Indies, integrates ecosystem assessment, scenario development, and economic valuation of ecosystem services into national sustainable development planning.' The Ministry of Planning and Sustainable development are committed to developing a New Spatial Planning approach, with ProEcoServ's support.
177. Green Fund has committed USD11,613,089 of co-financing and is looking to the project to support the development of PES. The Green Fund considers ProEcoServ to be a core part of the Government vision. Given that the Green Fund was established before ProEcoServ, the project was developed in tandem with the current Government.
178. According to the Ministry of Environment the project is really moving what the government has been thinking for a number of years. It is the first time a project is undertaking an evaluation of ES and they are Interested in how the outputs can be mainstreamed into biodiversity and areas that the Ministry is interested in.

179. Country ownership and driveness in Vietnam is high among Central Government. This ownership and support is provided directly through ISPONRE who are implementing the project. The DG of ISPONRE informs the Vice Minister of progress. In addition the MPI is very interested in the work and have a good working relationship with MONRE / ISPONRE. Two committees have been established to steer project implementation, one involves senior officials of various Ministers while the second receives technical inputs from various organizations and institutions. However, ownership at the provincial government and stakeholder level where the project is being implemented is low.

2.2.3 F: Achievement of outputs and activities

180. As mentioned above project implementation is behind schedule. As of 31 December 2012, 35% of activities had been completed compared to the planned level of 51%. Current progress is detailed in the ProEcoServ Half Yearly report, July – Dec, 2012, which details the level of delivery in percentages for each sub activity for each country, and for the global components.

2.2.4 G Preparation and readiness

181. This section presents a summary of the quality of the project design and is based on a review of the project document and feedback from interviewees. An analysis of the quality of project design was taken at the MTE inception phases, based purely on a review of the Project Document, and is provided in Annex 4. Overall the project design is rated as Satisfactory.

182. A key finding of the MA evaluation was that the MA process had little impact on the policy making and that limited tools were available for policy makers to make use of the science. The MA follow up strategy in April 2008 was targeted at key organizations willing to:

- Build the knowledge base and methodologies on valuation of ES
- Integrate ES based approaches into decision making
- Outreach and dissemination
- Undertake future global assessments (this is being taken up by IPBES]

183. The idea for ProEcoServ emerged to address the gaps identified. A consultant was engaged to design the overall strategy and a lot of time and effort was put into project design and collaborating with the pilot countries. Entry points were extensively discussed at design stage. The pilot country planning teams met for two days in South Africa to discuss the Logical Framework and develop their own Logical Framework reflecting their own conditions. Governments were also engaged at the preparation stage.

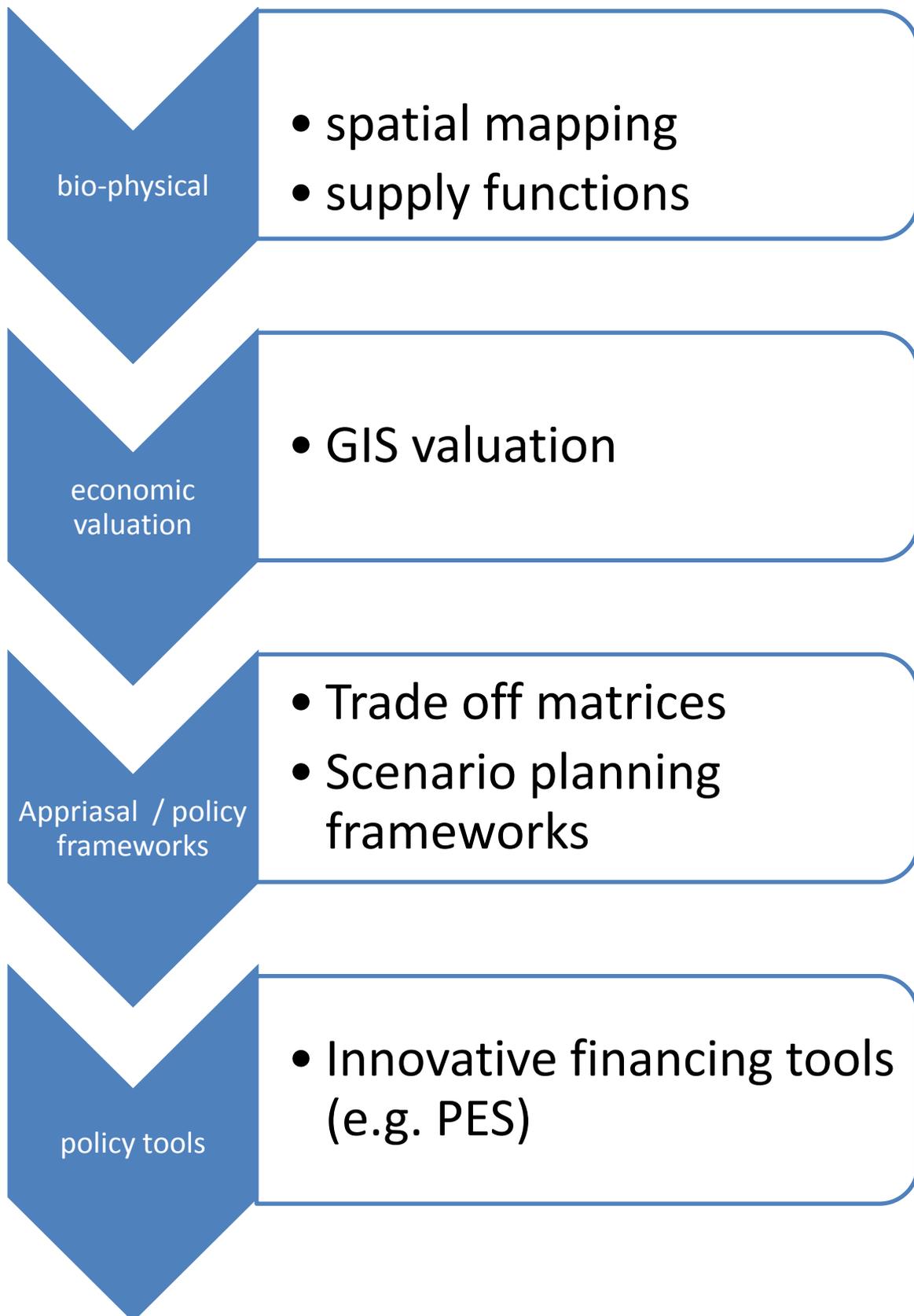
184. The Global Logical Framework was broadly designed and intended to serve as an umbrella, according to which countries could select what best suited them. The project was designed with the country teams following an intensive process and a meeting in South Africa to agree the logical framework and activities for the specific pilot countries. However, it appears that the project was too complex to fully grasp at the design stage, and countries commitment to doing almost all activities under the Global Logical Framework in good faith, without a clear understanding of what activities actually entailed or how they would fit together to contribute to the mainstreaming goals.

185. A theme that has arisen through the MTE is the complexity of the project and the many activities and reporting requirements. While a considerable amount of effort was put into designing the project, it is apparent that many of the concepts remained impenetrable to the project teams at the outset of implementation, contributing to delays in implementation in some instances. The technical terms in the project document would have benefitted from a glossary to improve understanding across the team (e.g. supply response functions, trade off matrices and their distinction with scenario planning, bundled ES, decision support systems). It is also difficult from all the activities in the project

document to derive a clear picture of how the different activities can work together to inform mainstreaming. One interpretation would be that the country teams would take these as a suite of possible options to be adapted to local studies, rather than attempting to follow all the activities. An understanding of how the component activities fit together is still not clear to some of the project teams.

186. Figure 6 presents a hierarchy of policy support tools, based on the specific activities that the countries are committed to deliver under Component 1 of the project (Policy Support Tools). It is based on the fact that good bio-physical data underpins the economic valuation work and many of the other expected outputs under Component 1 of the project (Policy Support Tools). Activity 1.1.5 talks about decision support systems, which could include scenario analysis, but could also involve a range of other established decision / appraisal frameworks such as EIA, SEA, Cost Benefit Analysis (CBA), Cost Effectiveness Analysis (CEA), Multi Criteria Analysis (MCA) and Green Accounting / GDP. It also includes the models being used by the project such as InVest and other biophysical models such as the Mass water Balance Model.

Figure 6: Hierarchy of Policy Support Tools



2.2.5 H: Implementation approach and adaptive management

187. A team of 43 staff is now involved in project, represented by eight different organizations across the project countries. An additional 36 organisations are involved through the Steering Committee, project meetings and public events. Overall 103 experts are involved in management of ProEcoServ.
188. In **Chile** CEAZA moved from being consultant (at the design phase) to the Executing Agency at implementation. There were delays in signing as CEAZA needed time to fully understand the project and how they could organize themselves to deliver it. Chile signed its Project Cooperation Agreement in April 2011.
189. Project implementation has been challenged by the distance of CEAZA, based in La Serena, to the study site, and the need to engage with a diverse set of stakeholders including 17 indigenous communities in San Pedro de Atacama. Around 1-2 times a month someone from the project visits San Pedro de Atacama, but it is difficult to develop networks between CEAZA, Antofagasta and San Pedro de Atacama without a more constant presence. There are also some members of the CEAZA technical team in Santiago.
190. Local communities, the municipality of San Pedro de Atacama, the provincial Government departments and technical teams all raised concerns regarding **communications**. The project has tried to set up structures (e.g. there is a communications consultant within the technical team, a regional coordination and a local co-ordinator), but the flow of information and messaging still need to improve. Parties would like to be better informed and in a more timely manner.
191. Better co-ordination between the CEAZA's project management team and the technical team is also needed. Both sides need to be clear on the technical outputs and the decision making processes these outputs will feed into. Further the project components need to be drawn together in a cohesive manner, so that all team members can see the links between components. This is currently lacking. Due to the complexities of activities considered in the project, a consultant has been appointed as a vice-coordinator/manager in charge of technical duties, however a common understanding of the activities and most importantly the policy targets of the project is not held by the technical team.
192. To improve project co-ordination the MOE in Antofagasta hired a full time regional co-ordinator. She visits San Pedro de Atacama about twice a month. In addition, in order to raise awareness and co-ordination among the local communities, the project has hired the president of the local community on a half time basis as the local co-ordinator in San Pedro de Atacama.
193. The project picked up fairly late and has moved slowly, so the proposed extension to December 2104 may well present challenges for the project. There is a concern that there will not be enough time to disseminate the tools and findings. However, the timeframe means that Chile has a reasonable budget to spend over the next 12 months, which may allow the team to reallocate spending to alleviate some of the key challenges.
194. **South Africa:** The project is being executed by CSIR in partnership with SANBI. The project team consist of between 10-20 established researchers, practitioners and two PhD students. The composition of the project team was purposeful to allow science-policy interchange, as well as to build capacity within the ecosystem sector in South Africa. While the project began late owing to delays in the PCA, work is now on track, and the majority of the expected deliverables and spending is running according to schedule, with a refocusing supported by this midterm review. Due to the size of the project team, only 20-30% of each member's time can be funded from the project which has resulted in some challenges around delivery although the consolidation of deliverables is expected to help in this respect, as well as support a greater focus on reflection and learning about mainstreaming.
195. In **Trinidad and Tobago** the project is being executed and coordinated by the University of the West Indies (UWI) in collaboration with The Cropper Foundation (TCF). The Cropper Foundation provides logistical support. UWI is responsible for financial management (receiving money from UNEP,

disbursing funds and audits). In 2012 ProEcoServ received an award for being the most successful international research project at UWI.

196. At the end of the last reporting period the team highlighted a mismatch between funds and the time required to undertake activities in the areas of project management, economics and communications. Budget revisions are being discussed accordingly and hopefully these areas will now be adequately resourced.
197. Up until April 2013, The Cropper Foundation's Project Manager / Technical Support Office, had 25% of time her time allocated to ProEcoServ, which has not been enough, and resulted in some delays in reporting. From the 1 May 2013 this has been increased to 85%, which should make a significant positive contribution to the project.
198. Since the Cropper Foundation is at a different physical location to the UWI communications can be difficult. However, the Project Manager proposes to spend 1 day a week in UWI from 1 May 2013.
199. At the UWI changes to Bursary has resulted in long delays in contracting and payments, which has held up some contracts being issued (e.g. economics). This is now improving.
200. The budget provides no funding to support the common service fee, a mandatory fee of the UWI to cover overhead costs of administering projects. This issue still needs to be satisfactorily resolved with the UWI. In addition there is no funding to undertake a project specific audit, so ProEcoServ has been audited along with all the University's projects by KPMG.
201. The team expressed concern over timelines to the evaluator. When the project was conceived it was a 5 year programme, but it has been compressed into 4 years. While the project was signed in August 2010, Trinidad and Tobago were only formally contracted in December 2010. However, it is understood that Trinidad and Tobago have agreed to complete the project by December 2014. .
202. The project has secured bright and enthusiastic PhD students to undertake the studies at the three demonstration sites. While this is good for building capacity and generating data it has resulted in some fragmentation within the team and presents project management challenges. The researchers need to be clear on how their work is contributing to ProEcoServ and the specific deliverables and timeline of ProEcoServ.
203. **Vietnam** established the project management unit (PMU, with a project director, a project manager, an administrative support staff and a provincial coordinator), and a technical working group (TWG), comprising of the Ministry of Planning and Investment, Ministry of Finance, Ministry of Natural Resources and Environment and the Ministry of Agriculture and Rural Development. Regular meetings are held between the technical team and the PMU. However, more emphasis needs to be placed on interactions at the provincial level and building up a core team to engage with in Ca Mau.

Global

204. On the whole the country teams feel that they have had good support from the UNEP project office. UNEP provides support through country visits and skype and email exchanges⁹. For most of the countries the networking opportunities provided through UNEP, through workshops and meetings, have been very valuable (for example, by putting them in touch with key resource persons on InVest in Vietnam and SEA in Trinidad and Tobago). However, all countries feel that they would benefit from more contact both to assist in / resolve project management issues in a timely fashion (i.e. at an early stage to minimize impacts on project implementation) and to provide needed technical support.

⁹ For example, the ESE Unit Chief has visited Vietnam twice and the Global Project Manager, once, to support the technical teams. Expertise on Strategic Environmental Assessment has been covered through Global Workshops at the request of Trinidad and Tobago.

UNEP's close involvement in all aspects of the project activities over the coming eighteen months will be very important.

205. A recruitment process of hiring a **project manager** was initiated in September 2010, after the commencement of the project. The first round of recruiting proved to be unsuccessful, hence a second round was carried out in November 2010. Based on the applications received through INSPIRA, four candidates were shortlisted and interviewed. In order to avoid further delays in the implementation of the project and to actively utilize the time until a project manager was contracted, a short-term consultant was engaged to coordinate the initial start-up phase of ProEcoServ, particularly with regard of organizing a global inception workshop and to support the countries in organizing their management processes and inception workshops at national level. The full time project manager took office as ProEcoServ Project Manager as of 25 June 2011.
206. A **Project Management Unit** has been established consisting of the Global Project Manager and the National Project Coordinators. They are responsible for co-ordinating work of country teams and quality assurance. The Global Project Manager is supported by two part time UNVs. The work of PMU has been supported by the Chief of ESE Unit, who provides technical and strategic guidance on the implementation of the project; the Program Officer of ESE Unit, who provides technical support to link ProEcoServ activities with UNEP's SGA, MA Follow-up, TEEB Follow-up, and IPBES initiatives; ESE Associate Program Officer of ESE unit who assists in financial management of the project and liaises with DEPI's financial management unit; and Administrative Assistant of ESE Unit who assists in travel planning of project manager, project related correspondences and administrative support of project implementation.
207. **Steering Committees:** The role of the national and global Steering and Advisory Committees is to provide a permanent quality check to project initiatives and results. Each chair of the national committee is the member of the global committee.
208. **In Trinidad and Tobago** there is a 12 member steering committee. It would be to the project's advantage for the steering committee to play a more active role in the project, providing feedback on reports and steering decisions on the project. It has been difficult to get feedback on the project to date and at the meeting attended by the evaluator the discussion and interaction was limited.
209. The Global Steering Committee comprises 13 members. The first Global Steering Committee Meeting of the ProEcoServ was held in Port of Spain, Trinidad and Tobago, from 21-24 May, 2012. The overall goal of the first steering committee meeting was to review the progress of Project for Ecosystem Services and get advice of the Steering Committee on the work plan, opportunities to link the project to other international initiatives. The second global steering committee was held in San Pedro de Atacama May 8-9 2013. It is generally felt that Global Steering Committee could function more effectively and have more of an input into the project. A problem related to their time commitment to the project is that they are unpaid. However, they represent a valuable body of expertise which could be better utilised to provide technical guidance not just at the annual SC meetings but through the year¹⁰.
210. Many consultees felt that the Global SC meetings could provide more time for teams to talk about issues and to share main challenges and experiences.
211. The Project Document states that specific outputs, regarded as particularly complex and/or contentious, will benefit from peer review during relevant stages of their development. To date Peer Review has been limited.

¹⁰ In addition to attending the Global SC Meeting, other routes through which the Global Steering Committee members have interacted with the project are: participated at the ProEcoServ workshop held at the IUCN World Conservation Congress; acted as resource persons at workshops; and, been guests on the project's podcast.

212. Since project design and inception, the international focus on Green GDP / Natural capital Accounting has been in the ascendancy. In response to this UNEP – DEPI has encouraged an increased emphasis on natural capital accounting. However many of the teams feel that this was not a focus of project design, and they do not have the expertise within their teams to undertake this kind of work. Adapting to this change in emphasis requires a review of scope and resources, particularly in Trinidad and Tobago, which is keen to do something on green accounting, but needs technical support and a clear plan of what can be realistically achieved within the next 18 months.
213. As discussed for some countries there has been a time lag in terms of really understanding the project. Some activities and objectives were not clear at the proposal stage but two years into implementation the country teams have a much better idea as to what to do and can realistically achieve. It is therefore a good time to strengthen the project and identify the most promising avenues. How countries restructure (adapt) themselves, if necessary, at this important junction will be very important in terms of the projects ultimate impact.
214. It is felt that the project has a good global footprint, but perhaps more focus in terms of outreach could be paid to the regional level. For example regional forums such as Caribbean week of agriculture (CARDI – Caribbean Agricultural Research Institute) could be used to build awareness in the Caribbean.
215. **Communications** at all levels of the project is fundamental to its success. The communications goal of the project is defined as “Mainstream knowledge and information on ecosystem services and biodiversity management into the public and private sectors; influence policy and regulatory frameworks; foster new sustainable partnerships and markets; and, scale up communication and exchange in and among pilot countries.” The strategy has seven communications objectives. The communications strategy is available online at the project’s web site (www.proecoserv.org)
216. The **project website** at www.proecoserv.org, created during the PPG phase and updated during the project, serves as the project’s main outreach tool. It includes an information hub, providing a document repository and information on lessons learned, partner organizations and other related initiatives and projects. ProEcoServ events are now published at ProEcoServ’s interactive “Events and Meetings” section. The website is centrally coordinated from Nairobi by the project manager and all country teams are encouraged to forward relevant information and documents for timely upload. Internal meetings and tele-conferencing is also used to coordinate among implementing project teams.
217. To increase the exchange among teams various social media tools have been developed including an internal e-mail list (proecoservkhub@unon.org), project facebook page, and twitter. However, there is very limited direct communication between the teams and all countries acknowledge that communications between teams is currently poor. Many options have been tried (e.g. teleconferencing), but it is difficult to achieve participation. The fact that the countries are spread across different time zones makes it difficult to find suitable times to talk. One potential option is to encourage technical team members to talk to each other where they are testing similar approaches or working on similar ecosystem services, rather than organizing larger team meetings.
218. All of the countries have developed a communications strategy. **Trinidad and Tobago’s** Communications strategy talks about establishing a brand identify for Pro EcoServ Trinidad & Tobago and increasing the capacity of journalists to report on ES and related research improvements.
219. Internal communication in UNEP is reported to be good, with different divisions being kept informed of ProEcoServ.

2.2.6 I: Financial planning and control

220. Financial planning and controls are all considered to be in order. The Executing Agency is responsible for how money is spent. They send cash advance requests / expenditure reports to the Implementing Agency every quarter and money is released based on this. Under the GEF process the project is given

a certain allocation each year, and the Global Project Manager is given a sub allotments based on this. Expenditures are divided into: (i) Project Global Project Manager's salary (ii) Travel Requests, which need to be cleared by DEPI Director before funds are released; (iii) PCA with country EAs. Expenditure reports for Q4 are needed by the end of January (as UNEP year end is in February) and this happened in 2012 and 2011. The Global PM scrutinizes the Quarterly Expenditure report from countries before sending them to Finance. No issues were raised regarding the timeliness or quality of financial reports, or timeliness of disbursements to the evaluator. The project's finances are audited at the UNEP level. At the global scale no additional funding has been leveraged to date.

221. Table 6 provides an overview of project funding. While Table 7 provides an overview of budget allocation across the timeframe of the project.

Table 6: Overall Project Funding

	USD	%
A. Cost to the GEF Trust Fund	6,296,637	24.3
B. Co-financing	19,620,551	75.7
Cash		
CSIR, South Africa	1,000,000	3.9
TCF, Trinidad and Tobago	150,00	0.6
Government of Viet Nam	426,250	1.6
RCFEE, Viet Nam	80,000	0.3
B.1 Sub-total	1,656, 250	6.4
In-Kind		
CONAMA, Chile	92,237	0.4
CONAF, Chile	80,000	0.3
DGA, Chile	80,000	0.3
SAG, Chile	80,000	0.3
Sematur, Chile	80,000	0.3
CEAZA, Chile	400,000	1.5
UDP, Chile	50,000	0.2
Aquacons, Chile	80,000	0.3
Escondid, Chile	100,000	0.4
SQM, Chile	100,000	0.4
IEB, Chile	274,285	1.1
UWI, Trinidad and Tobago	489,915	1.9
TCF, Trinidad and Tobago	144,500	0.6
GF, Trinidad and Tobago	10,826,674	41.8
ISPONRE, Viet Nam	300,000	1.2
PPG, Viet Nam	200,000	0.8
RCFEE, Viet Nam	300,000	1.2
IOG Viet Nam	200,000	0.8
IUCN, Viet Nam	300,000	1.2
UNPEI	25,000	0.1
NCP	45,000	0.2
UNU	80,000	0.3
UNEP	2,764,690	10.7
B.2 Sub-total	17,964,301	69.3
C. Project total	25,917,188	100

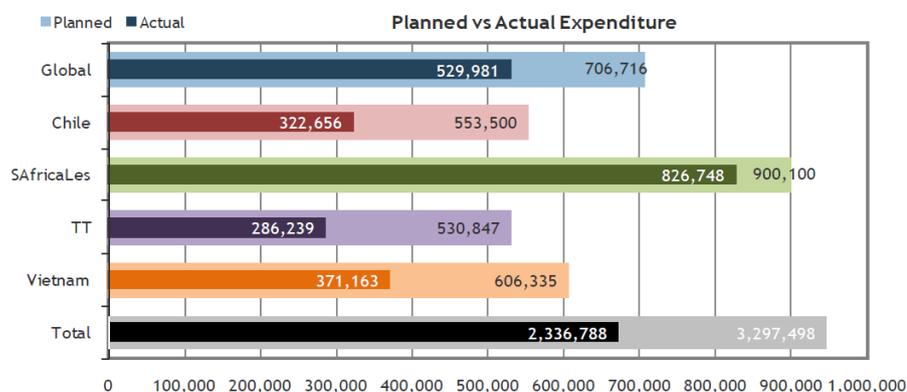
Source: Project Document

Table 7: Overview of Project Budget allocation: Budget Line

	Total	2011	2012	2013	2014
Global Project Manager / Technical Advisor	760,000	132,426	227,574	200,000	200,000
Intl. Consultants (environmental economy)	60,000	0	30,000	15,000	15,000
Intl. Consultants (policy mainstreaming)	55,500	0	27,750	13,875	13,875
Intl. Consultants (intl. BD and ES policy processes)	40,000	0	20,000	10,000	10,000
Intl. Communication Consultants	40,000	10,000	10,000	10,000	10,000
Intl. Consultants (Management)			40,000		40,000
Intl. Consultants (Project External Evaluations)	80,000	0	30,000	0	50,000
Global Project Manager (Travel)	98,606	104,848	448,652	264,250	204,250
Chile	1,022,000	288,077	536,923	412,500	412,500
SA/L	1,650,000	81,562	456,785	294,324	189,323
T&T	1,021,994	76,756	529,579	351,413	210,171
Vietnam	1,167,919	6,664	8,336	7,500	7,500
Global trainings	30,000	6,664	8,336	7,500	7,500
Global meetings	100,000	31,941	25,000	25,000	25,000
Global Printing and dissemination	50,000	90	24,910	12,500	12,500
Global Awareness raising	60,000	-	23,059	15,000	15,000
Global misc. coordination costs	20,618	-	10,360	5,080	5,178
Total	6,296,637	794,075	2,435,823	1,661,442	1,405,297

222. The total GEF contribution to Project for Ecosystem Services is USD 6,296,637. Due to the delays in the project's start up, the first year's actual disbursement was USD 794,075 - reflecting 53% of the allocated budget for the year. The semi-annual expenditure for the period July – December 2013 was USD 876,515 against a planned budget of USD1,214,161.
223. The cumulative expenditure of the project as of December 2012 was USD 2,336,787 representing 71% of the planned expenditure of USD 3,297,498 (Figure 7).

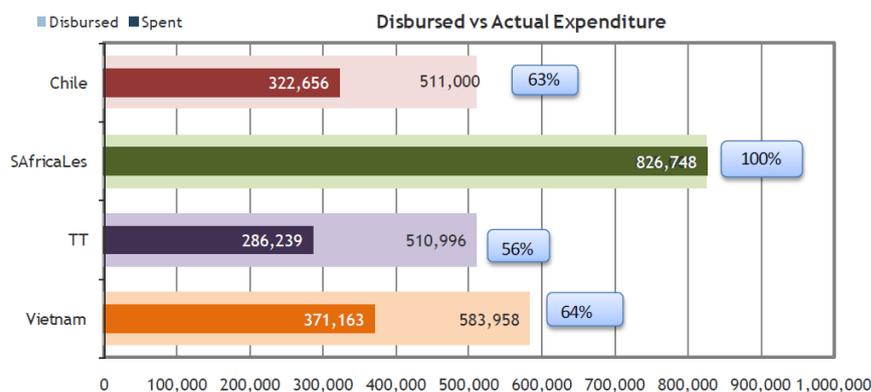
Figure 7: GEF Funds Disbursement 2012



Source: ProEcoServ. Half Yearly Progress Report, July-Dec 2012

224. In total USD 2,430,954 has been transferred to the project countries, of which 74% (USD 1,806,806) has been spent to date. In general, expenditure levels at the country level are behind schedule (Figure 8). However, the expenditure situation is improving as country-level activities are picking up.

Figure 8: Disbursed versus actual expenditure by country



Source: ProEcoServ. Half Yearly Progress Report, July-Dec 2012

225. In Trinidad & Tobago there have been delays in paying salaries due to the revision of contracts required by the UWI following the appointment of new legal officers. It is hoped that this situation can be resolved quickly.

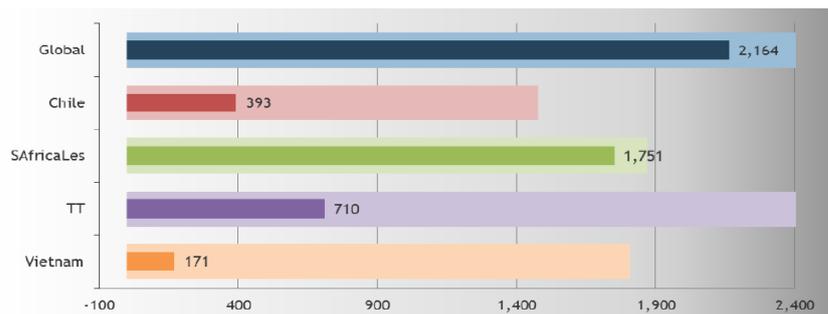
226. A priority is to get countries to spend over the next eighteen months, focusing on activities central to the achievements of the projects' outcomes. Countries need to prioritize and cut activities that do not directly contribute to the mainstreaming goals they are targeting. The Project Management Team needs to continue to proactively to support countries to raise the pace of activities and financial delivery. The aim is to complete all project activities by December 2014. There are a lot of administrative and financial implications associated with going beyond this period, for example additional funding would need to be found for the global Project Manager.

Co-financing

227. The ProEcoServ Global project manager also keeps records and reports on co-financing. The total co-finance committed to the project is USD19,620,551, 12 % of which is for the global component of the project. In-kind and cash co-financing commitments by country are: Chile - USD1,476,522; South Africa - USD1,870,000; Trinidad and Tobago - USD 12,013,089 (i.e. 61 % of total co-finance); and Vietnam USD1,806,250. The Green Fund is the main co-financier who has allocated finances for the implementation of a PES scheme in Trinidad and Tobago.

228. As of December 2012, USD 5,189,822 of committed co-finance for the Global component has been realized. USD 399,718 of this amount is in kind staff time of DEPI. Chief of ESE Unit, ESE Programme Officer, ESE Associate Programme Officer and Unit's Administrative Staff who provided around 480 man-days in 2012. As of December 2012, Chile has provided USD 393,457 in kind contribution, South Africa USD 1,751,305 (USD 881,305 in cash and USD 870,000 in-kind), Trinidad and Tobago USD 709,743 and Vietnam USD 171,250 Figure 9. The project management in Trinidad and Tobago has had difficulties getting the accounts from EMA to record in-kind contributions, and so the actual amount is thought to be under reported.

Figure 9: Co-financing January 2013 (in Thousands USD)



Source: ProEcoServ. Half Yearly Progress Report, July-Dec 2012

2.2.7 J: Monitoring and evaluation

2.2.7.1 M & E design

229. The project's Global Results Framework (Logical Framework) provides indicators, baselines, targets, verification methods and assumptions for each project outcome. On the whole the indicators (when viewed with the targets) are SMART (specific, measurable, attainable (realistic), relevant and time-bound), Mid-term and end-of-project targets are also provided in Annex 4 of the Project Document. These indicators along with the key deliverables and benchmarks included in Appendix 6 of the Project Document were designed to be the main tools for assessing project implementation progress and whether project results were achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Appendix 7 of the Project Document. Other M&E related costs are presented in the Costed M&E Plan and integrated in the overall project budget.
230. As discussed considerable effort was invested at the design stage to develop the Logframe and workplans with the pilot countries. Despite this the countries on the whole found the workplans and logical framework hard to understand and to implement. The relationships between the various activities and their link to mainstreaming were sometimes unclear as the countries embarked on implementation. As a result it was agreed that the pilot countries would revise their Logframes / work plans at the mid-term stage to clearly reflect their mainstreaming objectives and approaches, and to prioritize their activities to the end of the project.
231. At the time of project approval approximately 70% of baseline data was available. It was expected that the baseline data gaps would be addressed during the first year of project implementation, particularly in Viet Nam. A plan for collecting the necessary baseline data is presented in Appendix 7 of the Project Document. The main aspects for which additional information was needed were ecosystem data in the respective pilot sites, as well as opportunities and gaps in national policy and regulatory instruments as entry points for mainstreaming ecosystem services.

2.2.7.2 M & E implementation

232. The half annual global progress reports are clearly reported and analyzed and generally on time. The latest progress reports due in January 2013 were late, due to elections in Kenya and delays getting reports in from all 4 countries). The pilot countries provide individual reprints, which are then collated into a global report by the Global Project Manager. An annual Progress Implementation Review (PIR) report (July 2011 – June 2012) was completed accurately. The global progress reports are compiled by the global project manager based on the individual reports received from the pilot countries. The country level reports sometimes require revision and the provision of additional information.

233. The Project Document specifies that the METT is to be updated at the midterm stage, and in line with this the METT is currently being updated and is due to be submitted to GEF this period.
234. It was agreed at the second Global Steering Committee meeting in Chile (May 2013) that the countries would review their Logical Frameworks to ensure they were more country specific and SMART given the current status of the projects and the particular focus that the different pilot are taking, especially where this has evolved since the project design phase. This is an opportunity to revise the Global Logical Framework, which is being more or less generally applied across the countries and make it more tangible at the pilot country scale. It is an opportunity to be clear on how outcomes will be measured (quantified) in light of the particular mainstreaming opportunities the countries are targeting. It is noted that in certain situations it may be difficult to attribute the contribution of ProEcoServ where other donors and initiatives are involved and ways of quantifying the contribution of the project need to be specified. This exercise should be carried out in association with a review of activities, and may require certain activities, which have not been started in some countries, being dropped such that more focused can be placed on priorities for successful mainstreaming

2.2.7.3 Budgeting and Funding for M&E activities

235. There is funding at the global level for M&E activities as set out in Appendix 7 of the Project Document. The total budget specified at the design stage was US\$300,000, this covers both monitoring and evaluation activities. The budget allocated to the Mid Term review accommodated visits to 3 of the 4 pilot countries and to Nairobi. While a more in-depth analysis of South Africa would have been possible through a country visit, it is also evident that some generic issues were picked up through the Mid term review of benefit to all countries. A shortcoming is that there is no budget allocation at the country level for M&E. This has in some instances required countries to measure indicators for the semi-annual progress reports that are quite different to the deliverables planned.

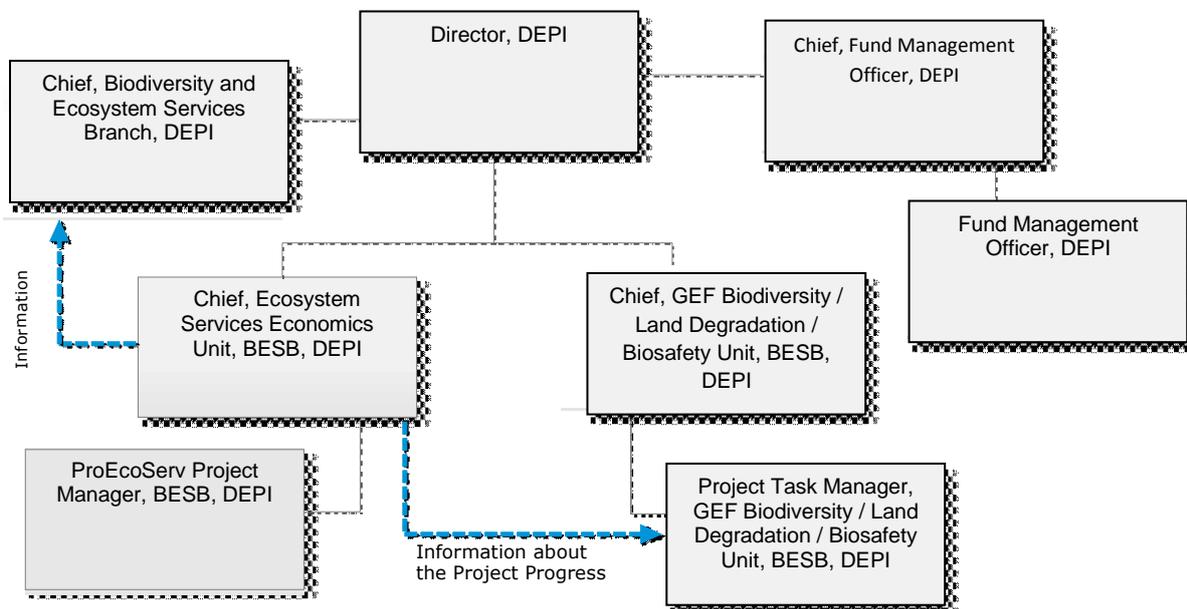
2.2.8 K: UNEP supervision and backstopping

236. ProEcoServ falls into the special category of UNEP's '**internally executed**' GEF projects. The Executing Agency of the project, responsible for all aspects of project execution, is UNEP's Division of Environmental Policy Implementation (DEPI) - Ecosystem Services Economics (ESE) Unit, while UNEP/DEPI/GEF BD/LD Unit operates as the GEF Implementing Agency, with a supervisory and oversight role.
237. At the design stage it was not envisaged that the project would be 'internally executed', but shortly after signature there was a re-structuring of GEF Operations within UNEP, following which the GEF division was disbanded and its staff distributed across other divisions. As a result, two different Units in the *same division* in UNEP are undertaking and supervising ProEcoServ. Whilst the Task Manager and Project Manager are in different Divisional Units and have different First Reporting Officers (see Figure 10) These First Reporting Officers both report directly to the Division Director. There is therefore limited segregation between the IA and EA, which is not preferred option as stated in UNEP's operational guidelines¹¹. This is not an ideal position as it compromises independence, and may put the Implementing Agency function in an uncomfortable position at times of tension or disagreement. This may be exacerbated where there are issues of seniority (e.g. where the Task Manager is less senior to the main EA team proponents he is overseeing). However, benefits to the internal arrangements have also been identified through ProEcoServ, namely it has facilitated communications between the EA and the IA which has contributed to the project's efficiency as

¹¹ 'UNEP policy states that the first choice is to have the IA function reside in a different division than the division being the executing agency. In exceptional circumstances where no other choice exists but to have the two functions reside in the same division, then the IA functions should be assigned to a staff with different reporting lines than the staff executing the project. Such projects will undergo additional scrutiny and reporting than externally executed projects. UNEP, 2012

queries over GEF protocol, for example, can be solved quickly. Exactly how to ensure the proper division of functions is still a matter for discussion within UNEP, although guidance on how to respond in these situations is available¹².

Figure 10: ProEcoServ reporting lines for IA & EA



238. While the project has not encountered problems with the current management arrangements to date, the real test for such arrangements arises when projects are underperforming and / or differences arise between the executing and implementing agencies. The potential for differences in opinions is arguably more likely as ProEcoServ moves into its final stages, especially given the increase in the rate of project activity that will be necessary to deliver all outputs on time. The UNEP supervision and backstopping function will therefore be very important over the remaining eighteen months to ensure problems, and their solutions, are identified at an early stage, and to ensure any revisions to the Logical Frameworks at the mid term stage are realistic and achievable within the remaining project timeframe. The project may therefore require more supervision going forward to ensure the core deliverables are realized on time.
239. The Implementing Agency (IA) for the project is responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures. The Implementing Agency has a responsibility for regular liaison with the Executing Agency (EA) on substantive and administrative matters and formally participates in the Project's Steering Committee meetings, organizes external evaluations with UNEP's Evaluation Office, reviews and clears semi-annual technical and financial reports and the annual PIR (Programme Implementation Reports) for the GEF. The UNEP/DEPI/GEF

¹² See – (i) UNEP, 2011. Integration of GEF Operations in UNEP: Accountability Framework for Directly Executed GEF Projects UNEP, 2012. (ii) Operational Guideline for implementing the Accountability Framework for Internally Executed GEF projects. UNEP states: 'In the event that UNEP is deemed to be the best choice for Executing Agency, the segregation of duties will be developed on a case by case bases and steps will be taken to ensure that no duplication will occur in accountability, or cost recovery. Furthermore reporting lines of the IA Task Manager and the EA project manager will be segregated as far as possible, and the IA Task Manager will be given sufficient authority to oversee the EA project Manager, regardless of seniority or grade'.

BD-LD Unit is also responsible for ensuring synergies and cross-fertilisation between ProEcoServ and other similar UNEP GEF projects¹³.

240. The UNEP Task Manager (TM) (located in the UNEP/DEPI/GEF BD-LD-BS Unit) and Financial Management Officer (FMO) (located in the UNEP/DEPI Finance Unit) provide assistance and advice to the EA on project management (e.g. revisions of work plan and budgets) and policy guidance in relation to GEF procedures, requirements and schedules. The TM and FMO are also responsible for clearance and transmission of financial and progress reports to the GEF. UNEP is expected to review and approve all substantive reports produced in accordance with the schedule of work.

¹³ UNEP, 2011. Integration of GEF Operations in UNEP: Accountability Framework for Directly Executed GEF Projects UNEP, 2012, includes an Annex setting out the roles and responsibilities of the IA and EA through the different stages of the project cycle.

3 Conclusions and Recommendations

3.1 Conclusion

241. ProEcoServ is a highly relevant and important project, which has generated a lot of Government interest and support in the countries pilot and internationally. The national Executing Agencies comprise highly qualified professionals who demonstrate a high level of commitment and enthusiasm in the project. ProEcoServ has already been successful in integrating ecosystem services into key national level documents in Chile, South Africa, Trinidad and Tobago and Vietnam. However, this is a complex project attempting to understand mainstreaming process across a broad range of ecosystem scales and institutional arrangements. Success of the project is contingent of the delivery of a large number of activities, and is underpinned by the availability of data, successful tool development (related to complex environmental processes) and the ability to influence decision makers and diverse stakeholder groups.
242. The project is now at an important point in its project cycle, with just eighteen months left it is vital that the project focuses on the key activities that will lead to successful mainstreaming. These are considered to be: Chile – the mainstreaming of the Water Balance and Tourism Models in San Pedro de Atacama; South Africa – mainstreaming of the disaster risk work in Eden, the Water Resource Classification work in the Olifants Catchment, and the national bio-physical maps; Trinidad and Tobago - the integration of ES and SEA into the national Physical Development Plan, the scoping of a PES schemes and setting the foundation for Green National Accounts; Vietnam – the integration of ecosystem services into land use management, with a focus on mangrove ES.
243. Table 8 summaries the ratings across the eleven assessment criteria. Overall the project is rated as Satisfactory.

Table 8: Summary of Ratings

Criterion	Summary Assessment	Rating
A. Attainment of project objectives and results		S
1. Effectiveness	ProEcoServ has already met some of its targets in terms of the integration of ES in official documents. To meet its other outcomes e.g. under component 1 there is a target that ‘at least 2 decision making bodies per pilot integrate information and tools indecision making’ a closer working relationship with decision makers over the next 18 months will be required in most cases.	S
2. Relevance	ProEcoServ is highly consistent with UNEP’s mandate. Ecosystem management is one of UNEP’s six priority areas. There is strong complementarity with other UNEP projects, and a strong focus on sub regional global issues and stakeholder priorities	HS

Criterion	Summary Assessment	Rating
3. Efficiency	<p>ProEcoServ builds on the SGA in the pilot countries and was carefully designed to build on existing institutions involved in SA / ES management and existing projects.</p> <p>Delays to project start up and a long lead time for some countries to fully understand how to undertake the project activities, has contributed to the project being behind schedule.</p>	S
B. Sustainability of project outcomes		ML
1. Financial	Additional financial resources may be required to sustain the project outcomes and it is not clear where this will come from, except in the case of Trinidad and Tobago and the Green Fund. This could be given more thought over the next 18 months	ML
2. Socio-political	<p>ML in Vietnam and Chile where ownership of targeted users of the decisions tools is currently low.</p> <p>L in South Africa & Trinidad and Tobago</p>	ML - L
3. Institutional framework	<p>High level of commitment from key Government focal points in all countries.</p> <p>In most countries high level strategies providing a foundation for a green economy and sustainable ecosystem management are in place. Chile is an exception to this.</p>	L
4. Environmental	<i>Not rated</i>	-
C. Catalytic role	Can only be properly assessed on completion of the decision support tools, but ProEcoServ has attracted project champions in most countries. Not enough emphasis has been placed on possible replication of the mainstreaming processes to date.	MS
D. Stakeholders involvement	Stakeholder consultation has been extensive in South Africa and Trinidad and Tobago. In Trinidad and Tobago the engagement could be more focused on the mainstreaming objective, In Chile and Vietnam more engagement is needed to successfully communicate the project to key stakeholders.	MS
E. Country ownership / drivenness	In all the pilot countries central Government agencies are fully behind ProEcoServ and wish to be more involved going forward. However ownership needs to be strengthened at the provincial level, especially in Chile and Vietnam, where such ownership is important	S

Criterion	Summary Assessment	Rating
	to the project's success.	
F. Achievement of outputs and activities	Project delivery is behind schedule across the countries. Project delivery is behind schedule across the countries due to delays at start up. However, the project is largely getting on track. At mid term 35% compared to the planned 51% of activities have been completed.	MS
G. Preparation and readiness	A lot of effort was put into project design, but the complexity of the project and the 'newness' of the subject area meant the activities and Logical Framework have been quite hard for countries to fully understand	S
H. Implementation approach	This complex project requires strong project management – communication & co-ordination could be improved across the project, as well peer review and the effectiveness of steering committees The close involvement of UNEP with all the pilot countries will be very important over the next eighteen months	MS
I. Financial planning and management	Proper financial standards are being adhered to. However delays to the project have led to under disbursement of funds and co-financing as reported is significantly below the planned level.	MS
J. Monitoring and Evaluation		MS
1. M&E Design	The Project Document details the Logical Framework and M&E implementation arrangements	S
2. M&E Plan Implementation	Progress reports are generally on time and of a good standard. A review of the country specific Logical Frameworks is currently underway to ensure the framework accurately reflects work priorities and country specific SMART indicators are in place	MS
3. Budgeting and funding for M&E activities	Budget allocations for the pilot countries for M&E activities are unclear	MS
K. UNEP Supervision and backstopping	No concerns or problems have arisen. However, internally executed projects are most at risk of encountering difficulties when a project is underperforming and/or conflicts between parties arise, which is not the experience with ProEcoServ to date.	S
Overall project rating		Satisfactory

3.2 Lessons Learned

244. The ProEcoServ progress reports present lessons learnt to date. Below are the key lessons that have emerged from the MTE.

- Technical terms need to be clearly explained in the Project Document and examples provided, given that for countries embarking on new conceptual approaches a considerable amount of effort is required firstly to understand the technical terms and concepts and secondly to considered how best they can be applied within a specific context.
- A ‘Mainstreaming’ project is very different to a conventional project. Right from the beginning it is necessary to interact with Government to ensure that the technical work is demand driven and policy makers are on board. Influencing decisions does not just depend on producing convincing science and economic numbers it is also about access, influence and relationships. Consensus, confidence and momentum need to be built up and this requires commitment, continuity and time. Research institutions have to work hard to build relationships with decision makers and be in a position to influence decisions.
- The starting point for design of the technical tools is a clear view on what the research and technical tools will be used for, and what steps need to be taken to influence policies. This requires knowledge of the fiscal & planning cycle so that outputs are provided in a timely manner. Social scientists should be involved in mainstreaming project to provide a deep understanding of the decision making process at specific study sites.
- For successful mainstreaming it is also important that policy and decision makers are involved from the start in the development of the decision support tools, so that they feel they have ownership of the tools and their findings. Importantly this also allows them to have a deep understanding of the models being developed, and thereby an appreciation of the tools’ capabilities and weaknesses and the priority follow on work that they might commission to develop the tool.
- Ensuring that project objectives are aligned with the Government’s strategy and goals is an important element in improving the project’s success; and because Government’s goals and priorities change and develop over time, it is important to ensure that the project is adaptable and flexible.
- While senior decision makers need to have an understanding of the approaches and results, and to have confidence in the project outputs, such high level officials are liable to change following elections. Therefore in order to ensure continuity in the project’s outputs technical staff should be trained in the use of the tools.
- As confirmed through the pilot project in Chile and in Vietnam, working with local / indigenous communities is challenging and requires a strong presence and time commitment in order to build relationship and trust and to be successful in explaining new and complex issues. Such consideration should be reflected in budget allocations at the design stage and take priority over reports where budgets are limited.
- Project management is crucial to the successful delivery of such a complex project. Therefore the project management components of projects with similar complexity need to be properly resourced.

3.3 Recommendations

245. A list of general recommendations, which apply across the pilot countries, is provided below. This is followed by country specific recommendations.

General

246. **Developing a diversity of tools:** There are different layers to decision making that can be informed by a variety of decision making tools. It is important therefore that the project tests a variety of approaches to build up an understanding of their contributions and limitations and of how they can inform each other / be linked with other decision making approaches (tools). Such an approach is supported by the heterogeneity across the pilot countries, not just in terms of scale and ecosystem focus but also in terms of the capacity and expertise of the assembled teams. The diversity of cases across the pilot studies can therefore serve to illustrate how mainstreaming can be operationalized in different situations. This means that not all countries need to attempt green accounting or have a primary focus on economic as opposed to physical tools. The focus and scope of the work of the pilot countries needs to be very clear over the next 18 months based who is in the best position to deliver specific tools. It is recommended that a revision of the project logical framework, workplan and targets is undertaken, to clarify the scope of work and focus for each country, so as to achieve/clarify a realistic balance and diversity of approaches.
247. **Green Accounting:** Interest in National Capital Accounts is welcome, offering a clear way to communicate with key decision makers such as the Ministry of Finance. However, it should not be mandatory for each country. While the project document refers to the integration of ecosystems services into macroeconomic policy, providing a platform for action in this area, the project's Logical Framework does not refer to Green GDP and it is not specified as an activity. While some activities would contribute to the development of Green GDP others do not and it is not possible within the limited time and resources available to the project to cover additional activities. While countries feel that they did not explicitly sign up to work on Green Accounting (as it is neither explicitly referred to in the Project Document nor was it discussed at the design phase) Trinidad and Tobago and Vietnam are very keen to progress this agenda. However, the inclusion of this activity requires: (i) a revision of the Logical Framework, to include targets and indicators on green accounting so that progress can be monitored, countries are adequately resourced to undertake the work, and the activity can be appropriately assessed in the Terminal Evaluation of the project; (ii) a scoping of what outputs can be realistically achieved in the next 18 months; and, (iii) technical support via ProEcoServ or through collaboration with other initiatives such as WAVES. These activities in Vietnam and Trinidad and Tobago should be led by the pilot countries, with support from UNEP. It is not anticipated that work on Green Accounting will be undertaken by ProEcoServ in South Africa and Chile, although the ecosystem valuation work in these countries can provide a basis for further initiatives in this area.
248. **Road map linking science to policy.** The main focus for the next 18 months should be making sure that mainstreaming is successful. This starts with being clear on what the policy goal is. It is recommended that each project sets out its road map for linking the science (decision support tools) with targeted policies. This road map needs to be linked to a timeline, so that all members of the project teams are clear on how activities are linked / feed into each other and when deliverables are needed by. This will help clarify what the realistic deliverables will be for each of the countries, and the risks involved. This should be drafted by the pilot countries, with support from UNEP. This exercise could be supported by the development of flow diagrams capturing the logic of mainstreaming process, which can be used as a communications as well as a management tool.
249. **Documentation of mainstreaming process / information for replication.** To date there has been no documentation of the mainstreaming processes being adopted by the pilot countries, and it is important that this is captured by the project to facilitate learning and to help identify replication opportunities. This should be drafted by pilot countries, with support from UNEP. A workshop within the next 6 months to start thinking about the successes and failures of the different tools as mainstreaming

instruments could be a useful way to consolidate the evidence on the diverse tools being developed across the project.

250. **Peer review:** A peer review process / strategy needs to be urgently developed for the project. This strategy should include guidelines / expectations for the peer view process (e.g. the different levels of peer review (internal / external, local / international) and the types of outputs / reports they should be applied to. Given the large number of project documents it is not possible to have all documents peer reviewed at the global level. All documents should be internally reviewed by the country teams and/or national consultants. However, a panel of peer reviewers needs to be established at the global project level to review *key* technical report, perhaps drawing on the global Steering Committee. It would be more effective if the peer review support was built in at the design stage for key technical outputs (models and economics), rather than waiting for final reports and outputs to ensure the best methodologies are being adopted. Peer review will lend credibility to the project's outputs, important to the Governments of the pilot countries and others who may want to replicate the tools and processes.
251. **Credibility of Tools.** The credibility of the tools is important in terms of their uptake both in the pilot countries and further afield. It is important that the key tools developed by the project are peer reviewed. The limitations and assumptions used in the tools should be made explicit. This is a concern specifically raised in the case of InVest which is being used by the majority of countries. Since the degree of uncertainty associated with the results is unknown the findings have to be interpreted with care. Invest should be built together with communities and other users so that they understand the rationale.
252. **Technical support.** It is important that the country teams have access to sufficient technical support over the remaining eighteen months of the project. Specific areas of technical support recommended include:
- Technical support has been requested in a number of cases including economics, trade off and scenario analysis, SEA, PES. The Global Project management team should consider how this can be supported and budgeted.
 - Economic valuation of ecosystem services is at an early stage of implementation across the countries, and could benefit from closer technical involvement to ensure that that right approaches are being adopted. The ESE is in a prime position to provide this advice.
 - There is a feeling that the training components offered at global meetings has had a very strong economics focus and the teams would like to be consulted on what other types of training, for example on behavioural change, would be useful.
253. **Rationalisation of the Logical Framework / Activities:** There is a general feeling that countries need to be very focused over the next 18 months, this may require cutting/adjusting some activities. Any significant departure from the Project Document should be well justified and supported by budget allocations, and revisions to the Logical Framework. This should be led by the pilot countries with the support of the Global Project Manager, and approved by the UNEP/GEF Task Manager.
254. **Dissemination a common output.** Given the limited interaction between countries it may be difficult to get a common integrated output, but this would be a good final output for the project. It would be interesting to present joint results and highlight the emerging commonality in the approaches. For example, San Pedro de Atacama and Eden are focused on a similar scale so it would be good to compare experiences in these cases. This could be developed by the Global Project Manager with support from the pilot countries¹⁴.

¹⁴ The Global team has proposed that the project prepares a joint paper on the lessons learnt from mainstreaming, and has distributed an outline for this paper for comment.

255. **Global Steering Committee.** It is recommended that ways are explored for increasing the impact of the Global Steering Committee, which offers a considerable body of expertise, which can be used to guide the technical outputs of the project. Ideas include more interaction between the Global Steering Committee throughout the year through conference calls, better planning for discussions at meetings, and a closed meeting at the SC to talk about country issues.
256. **ProEcoServ Implementing and Executing Agency in the same Division** – in-line with current guidance, it is recommended that this arrangement is avoided wherever possible for future projects. Experience with projects that have a single UNEP Division acting as both IA and EA is very limited. The evaluation recommends that the IA function within DEPI keep a clear record of lessons and experiences with regard to the segregation between the IA and EA functions. For the remainder of ProEcoServ it will be important for the Implementing Agency and Executing Agency to work closely together to ensure workplans and targets are feasible and delivery rate maintained. The Implementing Agency's supervision role will be very important in keeping the project on track, given the volume of work that need to completed by December 2014.
- 257. Communications**
- It should be clear in project communications that mainstreaming is the focus of ProEcoServ and that it is this aspect that sets it apart from other projects
 - 'Plain English' should be adopted in communications to ensure that they are accessible to all stakeholders.
 - Project publications should be proof read.
 - It has been difficult to promote communications between projects at the management level, but this may work better between the researchers. (e.g. Trinidad and Tobago talking to South Africa about their work on disaster management to understand synergies with work in the Northern Range)
258. **Capacity.** Capacity varies across the pilot countries. This influenced how quickly the countries mobilized and has implication as to what can be realistically achieved within the 4 year project timeframe. The fact that the countries started from different levels of understanding and knowledge of ES should be taken into account when considering the final outputs, so a realistic and fair picture of progress and achievement is created and appropriate recommendations for building on this are made, perhaps drawing on lessons learnt by the more advanced pilot countries. This diversity in 'starting points' between the pilot countries (and its implications) can be reflected in the Terminal Evaluation.
259. **Support for Legislators.** Among the pilot countries only South Africa is a member of Global Legislators Organisation for a Balanced Environment (GLOBE)¹⁵; GLOBE have no Caribbean members. The pilot countries, with the support of the Global Project management team, could consider forming a GLOBE chapter to enhance support to their legislators on environmental issues. This could facilitate the sustainability of the project outcomes, by engaging legislators in the pilot countries on best international practices and views on environmental legislation and policy.

Chile

¹⁵ The Global Legislators' Organisation (GLOBE) supports national parliamentarians to develop and agree common legislative responses to the major challenges posed by sustainable development, and is supported by UNEP.

260. **Engagement with the DGA.** As a priority the team should meet with the DGA to explain the capacity and potential uses of the Water Balance Model. This assumes a hydrologist is available to explain the model face-to-face.
261. **Awareness raising among the indigenous communities** requires more of a presence in San Pedro de Atacama. This may require a budget reallocation to perhaps fund a PhD student to be in San Pedro de Atacama full time. The Local Co-ordinator also needs more support from CEAZA to do his job effectively. ProEcoServ needs to be communicated in a way that is understandable to local communities. Local people consider the hills and mountains to be sacred because they provide water, therefore they already have a concept of ecosystem services. An approach that has worked in other countries is for the technical team to work with a group of indigenous people who then become the communicators. The Municipality in San Pedro de Atacama could lead on disseminating project to communities.
262. **Training / capacity building.** The models being developed need to be sustainable, not dependent on outside experts and this requires training and capacity building. Both the DGA and the Municipality require a team trained in the use of the tool. This may also require a budget allocation.
263. To increase continuity and awareness at meetings progress reports could be sent to regional stakeholders with an official mandate to comment.

South Africa

264. South Africa is the only country planning to focus on the learning aspects of mainstreaming, and should be encouraged to do this as it will be an important project output.
265. Given that South Africa has a broad programme, it would be better for the work to be consolidated rather than new activities added.

Trinidad and Tobago

266. Technical help is needed to design a PES scheme (e.g. economist and lawyer) based on international best practice. It may be worthwhile for an international consultant to do an overview of potential PES project at three ProEcoServ sites, and then select one to design under the project. This would help determine whether a portfolio approach towards PES financing proposed by the Green Fund makes sense and provide examples of potential schemes for further development.
267. As part of the more general exercise to define the deliverables that can be achieved within the remaining 18 months of the project, the precise tasks that can be undertaken regarding the PES scheme needs to be specified. PES schemes would normally require longer than 18 months to become operational and this may have implications for the realization of the co-financing contribution offered by the Green Fund.
268. There are other potential forms of sustainable finance – for example conservation easements, and bio diversity offsets which may be appropriate in Trinidad and Tobago. These could be explored as a more comprehensive review of sustainable finance options, but may best be undertaken as a post ProEcoServ activity given other priorities,
269. Technical support is also required to build a foundation for National Accounting and to define the economic valuation work. An international consultant is also needed to support with the integration of ES into SEA processes, as part of the National Spatial Plan.
270. A review of the communications strategy / activities is recommended such that communication efforts are more closely focused on mainstreaming and aligned with available budget.

Vietnam

271. At present the technical reports are in Vietnamese, except for an English Executive Summary. It is recommended that the technical reports are translated so that the Global PMU can fully understand the details of the outputs and provide proper technical support and peer review.
272. The project needs to develop a policy road map to understand research priorities at the provincial level. This road map should take into account the capacity and data available at the provincial level.
273. Greater support, awareness raising and capacity building at the provincial level is a priority need of the project. To be successful, the new approach needs to become part of Province's daily work. More in-depth training workshops will be needed to allow people the time to fully understand the approaches, along with a greater presence of the technical team in Ca Mau and more interactions with the Provincial Coordinator and technical staff in the Province
274. More **communication** activities are needed to increase understanding of Ecosystem Services across Ministries such as the Ministry of Trade and Industry, Transport, Construction, MARD (beyond forestry), MONRE (depart of minerals, land use, water resources) and MOF.

4 Annexes

4.1 Annex 1: Evaluation TORs

**TERMS OF REFERENCE. *Mid-term Evaluation of the UNEP/GEF Project
Project for Ecosystem Services” (short title: PROECOSERV)”***

PROJECT BACKGROUND AND OVERVIEW

Project General Information¹⁶

Table 1. Project summary

Project Title:	Project for Ecosystem Services (ProEcoServ)
Executing Agency:	Division of Environmental Policy and Implementation (DEPI)
Project partners:	CEAZA (for Chile), CSIR (for South Africa and Lesotho), UWI (for Trinidad and Tobago), ISPONRE (for Viet Nam)
Geographical Scope:	Global, multi country, Chile, Trinidad and Tobago, South Africa/Lesotho and Viet Nam
Participating Countries:	Chile, Trinidad and Tobago, South Africa, Lesotho and Viet Nam

¹⁶ Source: UNEP GEF Project Implementation Report (PIR) Fiscal Year 2010

GEF project ID:	3807	IMIS number:	GFL-2328-2740-4B34
Focal Area(s):	Biodiversity	GEF OP #:	2
GEF Strategic Priority/Objective:	BD2	GEF approval date*:	20 April 2010
UNEP approval date:	02 August 2010	Date of first disbursement*:	28 January 2011
Actual start date:	28 January 2011	Planned duration:	48 months
Intended completion date*:	31 December 2014	Actual or Expected completion date:	31 December 2014
Project Type:	FSP	GEF Allocation*:	US\$6,296,637
PPG GEF cost*:	US\$67,000	PPG co-financing*:	US\$22,465
Expected MSP/FSP Co-financing*:	US\$ 19,620,551	Total Cost*:	US\$25,917,188
Mid-term review/eval. (planned date):	June 2013	Terminal Evaluation (actual date):	August 2014
Mid-term review/eval. (actual date):	N/A	No. of revisions*:	1
Date of last Steering Committee meeting:	20-21 May 2012	Date of last Revision*:	23 May 2012
Disbursement as of 30 June 2012*:	US\$3,948,089	Date of financial closure*:	February 2015
Date of Completion:	n/a	Actual expenditures reported as of 30 June 2012:	US\$ 1,205,865.31
Total co-financing realized as of 30 June 2012:	US\$ 2,720,082	Actual expenditures entered in IMIS as of 30 June 2012*:	US\$ 1,205,865.31
Leveraged financing:	US\$17,254,981		

Project Background

1. Project Rationale¹⁷

1. The GEF Supported Millennium Ecosystem Assessment (MA) concluded that more than 60% of the world's ecosystem services are either degraded or used unsustainably. There is increasing evidence that many changes inflicted by human activities are potentially irreversible, particularly with regard to biodiversity, with likely negative impacts on development and human well-being that are disproportionately borne by

¹⁷ Source: Project Document: Project PIR (July 2011 – June 2012): UNEP DEPI draft ToR for the terminal evaluation of the ProEcoServ - project

disenfranchised people at local levels. Particularly affected are regulating services of the ecosystem, such as air quality regulation, climate regulation at regional and local levels, erosion regulation, water purification and waste absorption, or natural hazard regulation. This degradation constitutes a significant barrier to achieving the Millennium Development Goals, if it is not reversed through a set of changes in policies, institutions and practices to conserve or enhance ecosystem services that avoid negative trade-offs and instead provide positive synergies among ecosystem services.

2. The project for Ecosystem Services – ProEcoServ, builds on the GEF supported Millennium Ecosystem Assessment (MA) and its Sub-Global Assessments (SGAs) as well as the MA-follow-up process. The project focuses on addressing some of the identified shortcomings of the MA through closer focus on national assessments, strengthened involvement of stakeholders and introduction of tools, models and methods to decision makers to mainstream ecosystem services into development policies. The project serves as an umbrella and provides a joint programmatic framework under which five pilot countries re-assesses their MA Sub-Global assessments and develops country-specific activities for decision making.

3. The five pilot countries, Chile, South Africa and Lesotho, Trinidad and Tobago, and Viet Nam, were selected based on their existing and solid SGAs, their demonstrated interest to implement the project, as well as complementarity of the project's activities with national priorities and policies. Within these countries, the project is set to pilot the bundling of ecosystem services and integration of ecosystem service approaches in resource management and decision making.

4. The project aims to produce information on the linkages and potential trade-offs between ecosystem preservation and development processes, and thus provide better insight into key ecosystem services and how to preserve them sustainably. The incorporation of ecosystem service approaches into local, sub-national and national decision making is aimed to further strengthen sustainable use practices, while generating local incentives for the conservation of ecosystems. Incorporating the concept of ecosystem services into decision making may present opportunities to increase financial support for ecosystem conservation and therefore to enhance sustainability of conservation efforts. Increased financing is also envisaged to trigger more support for development of disaster preparedness tools and climate change adaptation mechanisms and therefore strengthen local constituencies' resilience to natural hazards. The project approaches are designed to have scaling-up and replication potential.

5. The project is expected to deliver global environmental benefits in the following areas:

- (a) Long-term conservation of species and habitat diversity, linked to reduced direct impacts and increased connectivity with relevant development processes;
- (b) Enhanced conservation of ecosystems, such as mangrove wetlands, drylands and coastal and marine ecosystems;
- (c) Improved protection for species diversity;
- (d) Strengthened habitat and ecosystem resilience;
- (e) Development of and access to innovative biodiversity conservation financing instruments;
- (f) Enhanced complicity and convergence of policy frameworks with ecosystem services approaches.

6. The proposed project is fully in line with the long-term objective 2 of the GEF's biodiversity focal area strategy. It aims at mainstreaming biodiversity in production landscapes/seascapes and sectors, and it is compliant with the strategic priorities 4 and 5 through a multi-pronged approach that supports the strengthening of policy and regulatory frameworks for mainstreaming biodiversity, while removing critical knowledge barriers and fostering markets for biodiversity goods and services.

2. Project objectives¹⁸ and components

7. The project's global environmental objective is stated as *to reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making.*

8. The project aims to achieve this objective through implementing four different components, namely:

- I. Development of policy support tools;
- II. Strengthening of the policy environment;
- III. A science-policy interface;
- IV. Project management.

9. Each pilot country has tailored activities and outputs which were designed to meet specific country needs and to be in line with the country base line. Table 2. lists the project's global components, expected outcomes and global outputs.

Table 2. Project components, expected outcomes and outputs

Project Objective: Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making		
Project Components	Expected Outcomes	Expected Outputs
1. Policy Support Tools	1.1 Decision- and policy-makers have access to strengthened capacity and technical advisory services to analyse how their policy decisions affect selected bundles of inter-related ecosystem services, incorporating resilience, risk and uncertainty factors. 1.2 Improved understanding	1.1.1 Spatial mapping of ecosystem services. 1.1.2 Estimation of supply response functions for selected bundles of ecosystem services. 1.1.3 Trade-off matrices produced across ecosystem services, and competing natural resource uses and human well-being. 1.1.4 GIS-based valuation of ecosystem services at sub-national levels, chiefly for regulating services. 1.1.5 Decision support systems to guide decision makers on choosing development strategies which ensure sustainable flow of selected bundle of ecosystem services. 1.1.6 Provision and dissemination of practical tools, guidelines, indicators and information for decision makers at various levels of the pilot countries. 1.1.7 Development of scenario planning as a decision support tool for understanding risk, uncertainty and building resilience. 1.1.8 Scenarios produced for the bundle of ecosystem services under different plausible futures. 1.1.9 Participation of local stakeholder groups in piloting

¹⁸ Terms such as development objective, long-term objective, outcomes etc. used in the following section are the ones used in the Project Document. Their use does not necessarily fit the internationally recognized definitions of those terms and the MTE Team will have to take this into account.

	in international fora of the potential for the development of new financial mechanisms for “non-carbon” ecosystem services	scenario planning. 1.2.1 Scoping for innovative international markets for “non-carbon” ecosystem services in Trinidad and Tobago
2. Policy Environment	2.1 Increased awareness, understanding and level of involvement of targeted stakeholders in the integration of ecosystem services management considerations into policy making processes in the pilot countries 2.2 Ecosystem services are integrated into socio-economic, legal and policy instruments	2.1.1 A systematic outreach and dissemination strategy on ecosystem services developed and executed in the four participating countries 2.1.2 An ecosystem services strategy developed for selected SMEs. 2.1.3 Partnerships built for public-private cooperation for ecosystem management 2.2.1 Opportunities and gaps identified in existing legal and regulatory instruments to accommodate ecosystem services (baseline to be established) 2.2.2 Promotion of equitable and pro-poor economic, regulatory and financial incentives for sustaining ecosystem services 2.2.3 Ecosystem services maps and valuation used to inform macroeconomic and sectoral planning 2.2.4 Pilot studies conducted on investment in ecological infrastructure to ensure an accepted minimum and sustainable flow of selected ecosystem services.
3. Science-Policy Interface	3.1 Increased policy relevance of ecosystem services sciences’ results in international BD and ES-related processes	3.1.1 Horizontal and vertical information exchange established on ES sciences, tools and policy processes 3.1.2 Outreach strategy developed to engage with policy platforms on ecosystem services (e.g. BD-related MEA COPs, IPBES, IHDP, GLOBE, TEEB)
4. Project Management		

3. Project area and main stakeholders

10. One of the shortcomings of the MA was that it had a very limited involvement of national and local stakeholders - the groups that ultimately make the decisions affecting ecosystem management and biodiversity. Therefore the Project for Ecosystem Services aimed to address this shortcoming and the importance of close engagement with the right stakeholders was emphasised in the project plan. The project underwent an analysis in each of the pilot countries to identify relevant stakeholders at national and local levels. The analysis focused at identifying awareness gaps and inconsistencies, stakeholder needs and opportunities and constraints for using ecosystem services in decision making and policy processes. The identified stakeholders ranged from relevant national and local government bodies, intergovernmental bodies, non-governmental organizations, community-based organisations to local communities. The project also engaged with universities for scientific inputs as well as private business, such as mining companies in Chile and insurance companies in South Africa.

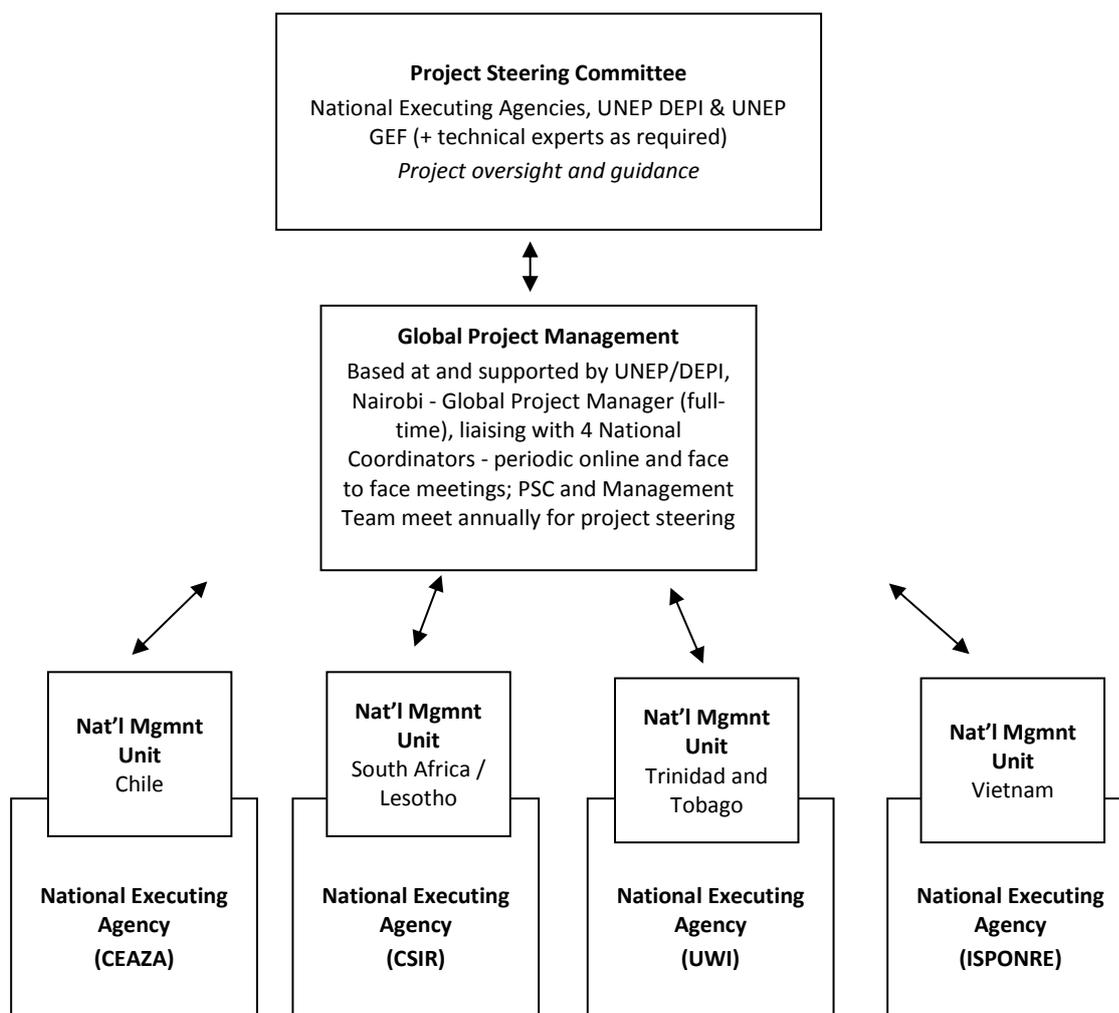
4. Executing Arrangements

11. UNEP is the GEF-designated Implementing Agency (IA) for the project, responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and is expected to provide guidance on linkages with related UNEP and GEF funded activities. UNEP also has a responsibility for regular liaison with the Executing Agency (EA) on substantive and administrative matters, and for participating in meetings and workshops as appropriate. The UNEP Task Manager (TM) and Financial Management Officer (FMO) (located in the UNEP/DEPI/GEF BD-LD Unit) should provide assistance and advice to the EA on project management (e.g. revisions of work plan and budgets) and policy guidance in relation to GEF procedures, requirements and schedules. The TM and FMO are responsible for clearance and transmission of financial and progress reports to the GEF. UNEP is expected to review and approve all substantive reports produced in accordance with the schedule of work.

12. This project falls within the special category of UNEP's "internally executed" GEF projects: the Executing Agency of the project is UNEP's Division of Environmental Policy Implementation (DEPI) - Ecosystem Services Economics (ESE) Unit. UNEP/DEPI/ESE will therefore be responsible for all aspects of project execution, while UNEP/DEPI/GEF BD/LD Unit operates as the GEF Implementing Agency, with a supervisory and oversight role, formally participating in the Project's Steering Committee meetings, organising external evaluations with UNEP's external Evaluation and Oversight Unit, reviewing and clearing semi-annual technical and financial reports and the annual PIR (Programme Implementation Reports) for the GEF. The UNEP/DEPI/GEF BD-LD Unit will also seek to ensure synergies and cross-fertilisation between ProEcoServ and other similar UNEP GEF projects.

13. The project has a Steering Committee (SC) composed of UNEP/DEPI/ESE as the project Executing Agency and UNEP/DEPI/GEF BD-LD Unit as the GEF Implementing Agency, as well as (a) representatives from the national executing agencies from the pilot countries and (b) external experts with relevant experience in ES studies, MA sub-global assessments and economic valuation worldwide, identified through UNEP/DEPI's international network. The Project Management team acts as the Secretariat to the SC. The role of the SC was stated as to provide overall project oversight, to evaluate the progress of the project relative to the products expected, to provide strategic directions for the implementation of the project – both at national and global level – and to maintain and promote the necessary inter-institutional coordination outside of the project, so as to promote the dissemination and adoption of ProEcoServ findings. The project also has the option of founding independent technical advisory groups, as required, to provide peer review to tools and approaches used and developed by the project.

14. At the national level, the project executing arrangements differ within the countries involved but each country has the selected institutions responsible for project execution and a project steering committee providing oversight. The national executing agencies are The Center for Advanced Studies on Arid Zones (CEAZA) (Universidad de La Serena and Universidad Católica del Norte) in Chile, the South African Council for Scientific and Industrial Research (CSIR) in South Africa and Lesotho, the University of the West Indies (UWI) in Trinidad and Tobago, and the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) in Viet Nam. The national Executing Agencies host national Project Managers responsible for in-country project management, coordination, execution, monitoring and financial/technical reporting.



5. Project Cost and Financing

15. The following Table presents a summary of expected costs per component and financing sources for the project as mentioned in the Project Document

Overall Project Budget

	<i>Project Preparation a</i>	<i>Project b</i>	<i>Total c = a + b</i>	<i>Agency Fee</i>	<i>For comparison: GEF and Co-financing at PIF</i>
GEF financing	67,000	6,296,637	6,363,637	636,364	6,296,637
Co-financing	45,000	19,620,551	19,665,551		14,000,000
Total	112,000	25,917,188	26,029,188	636,364	20,296,637

Project Framework

Project Components	GEF Financing*		Co-financing*		Total (\$)
	(\$) a	%	(\$) b	%	c=a+ b
1. Policy Support Tools	2,859,474	26%	8,290,238	74%	11,149,712
2. Policy Environment	2,228,163	19%	9,449,954	81%	11,678,117
3. Science-Policy Interface	580,000	36%	1,044,359	64%	1,624,359
4. Project Management	629,000	43%	836,000	57%	1,465,000
Total Project Costs	6,296,637	24%	19,620,551	76%	25,917,188

Project Co-financing

Cash		
CSIR, South Africa	1,000,000	5.1
TCF, Trinidad and Tobago	150,000	0.8
Government of Viet Nam	426,250	2.2
RCFEE, Viet Nam	80,000	0.4
<i>Sub-total</i>	1,656,250	8.4
In-kind		
CONAMA, Chile	92,237	0.5
CONAF, Chile	80,000	0.4
DGA, Chile	80,000	0.4
SAG, Chile	80,000	0.4
Sernatur, Chile	80,000	0.4
CEAZA, Chile	400,000	2.0
UDP, Chile	50,000	0.3
Aquacons., Chile	80,000	0.4
Escondida, Chile	100,000	0.5
SQM, Chile	100,000	0.5
IEB, Chile	274,285	1.4
CSIR, South Africa	800,000	4.1
SANBI, South Africa	70,000	0.4
UWI, Trinidad and Tobago	489,915	2.5
TCF, Trinidad and Tobago	144,500	0.7

The Green Fund, Trinidad and Tobago	10,828,674	55.2
ISPONRE, Vietnam	300,000	1.5
PPG, Vietnam	200,000	1.0
RCFEE, Viet Nam	300,000	1.5
IOG, Vietnam	200,000	1.0
IUCN, Vietnam	300,000	1.5
UNPEI	25,000	0.1
NCP	45,000	0.2
UNU	80,000	0.4
UNEP	2,764,690	14.1
<i>Sub-total</i>	17,964,301	91.6
Project Co-financing total	19,620,551	100.0

6. Project Implementation

16. The project's inception phase run from October 2009 to March 2010, during which the UNEP initial global project execution team was composed and the workplan was revised. From March 2010 to June 2011, the global team focused on the recruitment of the global project manager, preparation of contracts with the pilot country institutions and organization of the global inception workshop. During this period the country teams have selected and recruited their national project managers and technical teams. Therefore the project became fully operational and fully staffed in June 2011, when also the global inception workshop was held. From June 2011 to the end of 2011, the countries held their national inception workshops and project launch events. The first global steering committee meeting was also held in May 2012. According to the Project Progress Report for January to June 2012 and the PIR for FY 2012, the project implementation is now largely getting on track, even though the late start of the project may still result in a delay in the project completion date.

TERMS OF REFERENCE FOR THE EVALUATION

Objective and Scope of the Evaluation

17. In line with the UNEP Evaluation Policy¹⁹ and the UNEP Evaluation Manual²⁰ Mid-term Evaluation (MTE) of the **Project for Ecosystem Services (ProEcoServ)** is undertaken half way through project implementation to analyse whether the project is on-track, what problems or challenges the project is encountering, and what corrective actions are required. The MTE will assess project performance to date (in terms of relevance, effectiveness and efficiency), and determine the likelihood of the project achieving its intended outcomes and impacts, including their sustainability.

18. The MTE has the following primary purposes: (i) to provide evidence of results to date and of the likelihood of outcomes and impact in the future; (ii) to meet accountability requirements; (iii) to identify the challenges and risks to achievement of the project objectives and derive corrective actions needed for the project

¹⁹

<http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

²⁰

<http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

to achieve maximum impact and sustainability. In addition, the MTE is expected to promote learning, feedback, and knowledge sharing through results and lessons learned among the Executing Agency and its partners, UNEP, the GEF and their partners. It will focus on the following sets of **key questions**, based on the project's Logframe and current implementation issues, which may be expanded by the consultants as deemed appropriate:

19. **What are the key challenges to project implementation and what remedies can be proposed?** What are the main issues underlying any significant delays incurred so far in project execution? How can these issues be addressed within the limits of existing resources and within the project timeframe?

20. **What progress has been made to integrate ecosystem assessment, scenario development and economic valuation of ecosystem services into national sustainable development planning?** Is the capacity of each partner organization at the national level adequate to support the timely execution of the demonstration projects within the remaining time frame? If not, how can this aspect be improved? Is the operational, managerial and administrative support deployed by UNEP to support the country-level demonstration projects adequate to the task at hand? If not, how can this aspect be improved? In the current context, what can realistically be achieved in each country in the time remaining to the project?

21. **What is the status of the pilot projects?** What can realistically be achieved in the time remaining to the project

22. **Can the project realistically achieve its intended outputs and objectives within the time remaining?** If not, what would be a more realistic time frame or what activities should be prioritized so that the main outputs and objectives can still be achieved in a timely manner? Can the major sub-contracts and other regional-level consultancies be effectively completed within the remaining time of the project? Will the results of these regional-level components effectively support the achievement of key project objectives at the regional/country/local level?

23. **What is the likely expected impact of the project in the current context?** Is the project in a position to achieve its targets as spelled out in its M&E Logical Framework? Can the project ensure the completion, wide dissemination and adoption of proposed measures and plans for the sustainable development of ecosystems in the target countries and areas? Is the project taking advantage of most recent best practices in ecosystem services?

24. **What is the status of M&E of the project implementation?** Has the project established an effective evaluation and monitoring system and is the capacity for M&E among project personnel sufficient? What is the status of the use of the Management Effectiveness Tracking Tool (METT)?

Overall Approach and Methods

25. The MTE of the Project for Ecosystem Services will be conducted by one independent consultant under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP DEPI Task Manager.

26. The MTE will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

27. The findings of the evaluation will be based on the following:

28. A **desk review** of project documents²¹ including, but not limited to:

- Relevant background documentation, *inter alia* UNEP and GEF policies, strategies and programmes, the preliminary documents prepared under the PDF-B grant preceding the project, and the Millennium Ecosystem Assessment and the project terminal evaluation;
- Project design documents including the Stakeholder participation plan; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;

²¹ Documents to be provided by the UNEP are listed in Annex 5.

- Project reports such as progress and financial reports from the UNEP/DEPI, the five pilot countries, consultants and sub-contractors, meeting minutes of the global and national Steering Committees; annual Project Implementation Reviews (PIRs) and relevant correspondence;
- Documentation related to project outputs;
- Documentation available on the project website www.proecoserv.org.

29. **Interviews**²² with:

- Project management and execution support in UNEP/DEPI (Nairobi);
- UNEP/GEF Task Manager, ProEcoServ Project Manager and Fund Management Officer (Nairobi);
- UNEP Regional Offices – ROA for South Africa and Lesotho, ROLAC for Chile and Trinidad and Tobago, and ROWA for Viet Nam
- Project executing partners in the pilot countries
- Representatives of the project and pilot country steering committees and the advisory committees,
- Major co-financing (cash and in-kind) partners
- Representatives of major partners and sub-contractors
- Relevant consultants and other project partners

30. **Country visit.** The Consultant will visit the project management team and the UNEP Evaluation Office in Nairobi, after which the consultant will visit three selected pilot countries: Viet Nam, Trinidad & Tobago and Chile to meet with the project stakeholders and to visit selected demonstration sites (Ca Mau region in Viet Nam, Nariva Swamp and the Northern range in Trinidad, Buccoo Reef and Bon Accord Lagoon complex in Tobago, and Antofagasta and San Pedro de Atacama in Chile. These target countries were selected by the Evaluation Office, in coordination with UNEP/DEPI/ESE, UNEP/GEF/BD-LD Unit, giving due consideration to cost effectiveness, budget and time factors as well as the need for an adequate and representative sample to support the findings of the evaluation.

Key Evaluation principles

31. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned²³. Analysis leading to evaluative judgements should always be clearly spelled out.

32. The evaluation will assess the project with respect to a **minimum set of evaluation criteria** grouped in four categories: (1) Attainment of objectives and planned results, which comprises the assessment of outputs achieved, relevance, effectiveness and efficiency and the review of outcomes towards impacts; (2) Sustainability and catalytic role, which focuses on financial, socio-political, institutional and ecological factors conditioning sustainability of project outcomes, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices; (3) Processes affecting attainment of project results, which covers project preparation and readiness, implementation approach and management, stakeholder participation and public awareness, country ownership/driven-ness, project finance, UNEP supervision and backstopping, and project monitoring and evaluation systems; and (4) Complementarity with UNEP strategies and programmes. The lead consultant can propose other evaluation criteria as deemed appropriate.

33. **Ratings.** All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with UNEP strategies and programmes is not rated. Annex 2 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.

²² Face-to-face or through any other appropriate means of communication

²³ Individuals should not be mentioned by name if anonymity needs to be preserved.

34. In attempting to attribute any outcomes and impacts to the project, the evaluators should consider the difference between **what has happened with** and **what would have happened without** the project. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

35. Particular attention should be given to identifying implementation challenges and risks to achieving the expected project objectives and sustainability. Therefore, when reviewing progress to date, the **“why?” question** should be at front of the consultants’ minds all through the evaluation exercise. This means that the consultants need to go beyond the assessment of “what” the project performance is to date, and make a serious effort to provide a deeper understanding of “why” the performance is as it is, i.e. of processes affecting attainment of project results (criteria under category 3 presented below). This should provide the basis for the corrective actions recommended by the evaluation and the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain “why things happened” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere assessment of “where things stand” today.

Evaluation criteria

Attainment of Objectives and Planned Results

36. The evaluation should assess the relevance of the project’s objectives and the extent to which these were effectively and efficiently achieved or are expected to be achieved.

a) *Achievement of Outputs and Activities:* Assess, for each component, the project’s success in producing the programmed outputs, both in quantity and quality, as well as their usefulness and timeliness. Briefly explain the degree of success of the project in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section 3 (which covers the processes affecting attainment of project results).

b) *Relevance:* Assess, in retrospect, whether the project’s objectives and implementation strategies were consistent with: i) national environmental priorities; ii) the UNEP mandate and policies at the time of design and implementation; and iii) the GEF Biodiversity focal area, strategic priorities and the relevant operational program(s).

c) *Effectiveness:* Assess whether the project is on track in achieving its main objectives and its component objectives as per the Results Framework. Briefly explain what factors are affecting the project’s achievement of objectives, cross-referencing as needed to more detailed explanations provided under Section 3.

d) *Efficiency:* Assess the cost-effectiveness and timeliness of project execution to date. Describe any cost- or time-saving measures put in place in attempting to implement the project within its programmed budget and timeframe. Analyse how delays have affected project execution, costs and effectiveness. Wherever possible, compare the cost and time over results ratios of the project with that of other similar projects. Give special attention to efforts by the project teams to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency.

e) *Review of Outcomes to Impacts (ROtI):* Reconstruct the logical pathways from project outputs over achieved objectives towards impacts, taking into account performance and impact drivers, assumptions and the roles and capacities of key actors and stakeholders, using the methodology presented in the GEF Evaluation Office’s ROtI Practitioner’s Handbook²⁴ (summarized in Annex 6 of the TORs). Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour.

²⁴ http://www.thegef.org/gef/sites/thegef.org/files/documents/Impact_Eval-Review_of_Outcomes_to_Impacts-RotI_handbook.pdf

Sustainability and catalytic role

37. **Sustainability** is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluation should ascertain to what extent an exit strategy for the project has been prepared and how project results will be sustained and enhanced over time. The evaluation will have to ascertain that the project is looking further than its immediate outputs. Application of the ROI method will assist in the evaluation of sustainability.

38. Four aspects of sustainability will be addressed:

a) *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? What is the project doing to ensure this socio-political sustainability of results and benefits?

b) *Financial resources.* To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial resources²⁵ will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact? What concrete efforts is the project making to ensure financial sustainability of results and benefits?

c) *Institutional framework.* To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements so far, such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources? How is the project contributing to the sustainability of these institutional achievements?

d) *Environmental sustainability.* Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? How is the project dealing with these?

39. **Catalytic Role and Replication.** The *catalytic role* of GEF-funded and UNEP-implemented interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP and the GEF also aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project is:

a) *catalysing behavioural changes* in terms of use and application by the relevant stakeholders of: i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed; and iii) assessment, monitoring and management systems established at a national and sub-regional level;

b) providing *incentives* (social, economic, market based, competencies etc.) to contribute to catalysing changes in stakeholder behaviour;

²⁵ Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

- c) contributing to *institutional changes*. An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in the national demonstration projects;
- d) contributing to *policy changes* (on paper and in implementation of policy);
- e) contributing to sustained follow-on financing (*catalytic financing*) from Governments, the GEF or other donors;
- f) creating opportunities for particular individuals or institutions ("*champions*") to catalyse change (without whom the project would not have achieved all of its results).

40. *Replication*, in the context of UNEP and GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future, with special attention to the three pilot projects underway. What are the factors that may influence replication and scaling up of project experiences and lessons?

Processes affecting attainment of project results

41. **Preparation and Readiness.** Are the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Is the project document clear and realistic to enable effective and efficient implementation? Are the partnership arrangements properly identified and the roles and responsibilities well negotiated? Are counterpart resources (funding, staff, and facilities) and enabling legislation assured? Are adequate project management arrangements in place? Have lessons from other relevant projects been properly incorporated in the project design and implementation? Are lessons learned and recommendations from Steering Committee meetings adequately being integrated in the project approach? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.?

42. **Implementation Approach and Adaptive Management.** This includes an analysis of approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

- a) Ascertain to what extent the project implementation mechanisms outlined in the project document are being followed and are effective in delivering project outputs and outcomes. Have pertinent adaptations been made to the approaches originally proposed?
- b) Assess the role and performance of the units and committees established and the project execution arrangements at all levels, with particular attention to (a) the "internal execution" arrangements (i.e. ensuring the adequate separation of duties and responsibilities between UNEP's execution and implementation functions) as put in place by UNEP in Nairobi, including compliance with the recent UNEP guidelines on this specific category of GEF projects, and (b) execution arrangements at country level;
- c) Evaluate the effectiveness and efficiency of project management at the UNEP and the country level. How well is management able to adapt to changes during the life of the project?
- d) Assess the extent to which project management is responsive to direction and guidance provided by the Steering Committee (project and country-level) and UNEP;
- e) Identify administrative, operational and/or technical problems and constraints that influence the effective implementation of the project, and how the project partners try to overcome these problems.

43. **Stakeholder²⁶ Participation and Public Awareness.** The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions and private interest groups. The assessment will look at the approach(es) used to identify and engage stakeholders in project design and implementation. What are the strengths and weaknesses of these approaches with respect to the project's objectives? What is the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during the course of implementation of the project?

44. The ROTI analysis should assist the consultants in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and objectives to impact.

45. **Country Ownership and Driven-ness.** The evaluation will assess the performance of the pilot countries, namely:

- a) in how have the Governments of the pilot countries assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received so far from the various partners involved in the project and the timeliness of provision of counter-part funding to project activities;
- b) to what extent the political and institutional frameworks of the countries have been conducive to project performance;
- c) to what extent have the pilot countries promoted the participation of communities and their non-governmental organisations in the project; and
- d) how responsive have the pilot countries been to the project coordination and guidance and to UNEP supervision recommendations.

46. **Financial Planning and Management.** This requires the assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The MTE will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:

- a) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources are available to the project and its partners;
- b) Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might influence project performance;
- c) Present to what extent co-financing has materialized so far as compared to what was expected at project approval. Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of actual costs and co-financing for the different project components (see tables in Annex 3).
- d) Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.

47. **UNEP Supervision and Backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to

²⁶ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:

- a) The adequacy of project supervision plans, inputs and processes;
- b) The emphasis given to outcome monitoring (results-based project management);
- c) The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);
- d) The quality of documentation of project supervision activities; and
- e) Financial, administrative and other fiduciary aspects of project implementation supervision.

48. **Monitoring and Evaluation.** The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will appreciate how information generated by the M&E system during project implementation is being used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:

a) *M&E Design.* Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The timeframe for various M&E activities and standards for outputs should be specified. The evaluators will use the following questions to help assess the M&E design aspects:

- Quality of the project logframe as a planning and monitoring instrument: compare and assess the Logframe in the Project Document and the Logframe used in the Project Implementation Review reports to report progress towards achieving project objectives;
- SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
- Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?
- Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?
- Arrangements for evaluation: Have specific targets and deadlines been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Are there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
- Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and is funded in a timely fashion during implementation.

b) *M&E Plan Implementation.* The evaluation will verify that:

- the M&E system is operational and facilitates timely tracking of results and progress towards projects objectives throughout the project implementation period;
- annual project reports and Progress Implementation Review (PIR) reports are complete, accurate and with well justified ratings;
- the information provided by the M&E system is really being used to improve project performance and to adapt to changing needs.

Complementarities with the UNEP strategies and programmes

49. UNEP aims to undertake GEF funded projects that are aligned with its own strategies. The evaluation should present a brief narrative on the following issues:

- a) *Linkage to UNEP's Expected Accomplishments and POW 2010-2011.* The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ROTI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy (MTS)²⁷/ Programme of Work (POW) 2010/11 would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist.
- b) *Alignment with the Bali Strategic Plan (BSP)²⁸.* The current and intended outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.
- c) *Gender.* Ascertain to what extent project design, implementation and monitoring take into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Appreciate whether the intervention is likely to have any lasting impacts on gender equality and the relationship between women and the environment. Are there any unresolved gender inequalities that could affect sustainability of project benefits?
- d) *South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

The Evaluation Consultant

50. One independent consultant will be hired for this evaluation. The consultant should have the following expertise and experience

- (a) Master's degree or higher in environmental management or equivalent environment-related field with at least 15 years of relevant working experience;
- (b) Expertise in conducting project evaluations, preferably evaluation of large, multi-country, UN-implemented and GEF-funded environmental projects;
- (c) Expertise in biodiversity conservation and natural resource management, including international cooperation, institutional strengthening, community involvement, community-based development programmes;
- (d) Experience in management of large regional development projects;
- (e) Good knowledge of UNEP-GEF portfolio and areas of work.

51. The **Consultant** will be responsible for the data collection and analysis phase of the evaluation, and for preparing the evaluation report. (S)He will ensure that all evaluation criteria are adequately covered by the evaluation.

²⁷ <http://www.unep.org/PDF/FinalMTSGCSS-X-8.pdf>

²⁸ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

52. By undersigning the service contract with UNEP/UNON, the consultant certifies that (s)he has not been associated with the design and implementation of the project in any way which may jeopardize her/his independence and impartiality towards project achievements and project partner performance. In addition, (s)he will not have any future interests (within six months after completion of his/her contract) with the project's executing or implementing units.

Evaluation Deliverables and Review Procedures

53. The Consultant will, after an initial telephone briefing with the UNEP Evaluation Office and the UNEP Project Manager, conduct initial desk review work and prepare and submit a brief inception report to the UNEP Evaluation Office. The inception report should be approved by the UNEP Evaluation Office before starting fieldwork or desk based phone/email interviews.

54. The inception report lays the foundations for the main evaluation. Its purpose is to develop an evaluation framework that includes:

a) A review of the quality of project design to help identify how project design impacts on project implementation and performance;

b) analysis of the project's theory of change, creating a baseline which can be used to assess the actual project outcomes and impacts (expected and unexpected) during field visits and interviews;

c) A detailed plan for the evaluation process.

55. The main components of the inception report are:

56. Review of the Quality of Project Design: The review of project design is done on the basis of the project document and log frame. The Consultant should also familiarize her/himself with the history and wider context of the project (details available on UNEP and the project website, documentation from past projects etc). The analysis should be used to complete the 'Template for assessment of the quality of project design' (in the Annex 7 of the TORs). The rating system follows the Evaluation ratings used for the main evaluation (also described in the annex of the TORs).

57. Theory of Change Analysis: Annex 6 of the TORs on Introduction to Theory of Change/Impact pathways, the ROI Method and the ROI results score sheet describes in details the Theory of Change approach. The Theory of Change analysis should be captured in a Theory of Change diagram, found in the annex. The diagram can be shared with project stakeholders in the course of the evaluation, as tool to aid discussion. Please note that the ratings requested in the annex are not needed in the inception report's Theory of Change analysis. The consultant should complete the ratings after the field visits/interviews. The ToC diagram and ratings should be incorporated in final evaluation report.

58. Evaluation Process Plan: The evaluation process plan is based on a review of the project design, theory of change analysis and also of all the project documentation (listed in TORs). The evaluation plan should include: summary of evaluation questions/areas to be explored/questions raised through document review; description of evaluation methodologies to be used.; list of data sources, indicators; list of individuals to be consulted; detailed distribution of roles and responsibilities among evaluation consultants (for larger evaluation teams); revised logistics (selection of sites to be visited)/dates of evaluation activities.

59. **The main evaluation report** should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. The report will follow the annotated Table of Contents outlined in Annex 1. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate.

60. **Report summary**. The Consultant will prepare a 5-10 slide presentation summarizing the key findings, lessons learned and recommendations of the evaluation. This presentation will be presented by the UNEP Task Manager at the next meeting of project stakeholders in Chile from 8th to 10th May 2013. The purpose of this

presentation is to engage the main project partners in a discussion on the evaluation results and obtain their buy-in into the MTE recommendations.

61. **Review of the draft evaluation report.** The Consultant will submit the zero draft report to the UNEP EO according to the schedule described below, and revise the draft following the comments and suggestions made by the EO. The EO will then share the first draft report with the UNEP/DEPI Task Manager for review and comments. UNEP/DEPI will forward the first draft report to the executing agencies in the pilot countries and other relevant project stakeholders. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the Consultant in preparing the final draft report. The Consultant will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The Consultant will prepare a **response to comments** that contradict the findings of the evaluation team and could therefore not be accommodated in the final report. This response will be annexed to the MTE report to ensure full transparency.

62. Consultations will be held between the Consultant, EO staff, the UNEP/GEF, UNEP/DEPI and key members of the project execution team. These consultations will seek feedback on the proposed recommendations and lessons.

63. **Submission of the final Mid-term Evaluation report.** The final report shall be submitted by Email to:

Segbedzi Norgbey, Head
UNEP Evaluation Office
P.O. Box 30552-00100
Nairobi, Kenya
Tel.: (+254-20) 762 3387
Email: segbedzi.norgbey@unep.org

64. The Head of Evaluation will share the report with the following persons:

Maryam Niamir-Fuller, Director
UNEP/GEF Coordination Office
Nairobi, Kenya
Email: maryam.niamir-fuller@unep.org

Ibrahim Thiaw, Director
Division of Environmental Policy Implementation (DEPI)
United Nations Environment Programme
Nairobi, Kenya
Email: ibrahim.thiaw@unep.org

Edoardo Zandri, Task Manager
GEF Biodiversity/Land Degradation/Biosafety Unit

Division of Environmental Policy Implementation (DEPI)

United Nations Environment Programme

Nairobi, Kenya

Telephone: (+254-20) 762 4380

Email: edoardo.zandri@unep.org

65. The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou and may be printed in hard copy. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.

66. As per usual practice, the UNEP EO will prepare a **quality assessment** of the zero draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against both GEF and UNEP criteria as presented in Annex 4.

67. The UNEP Evaluation Office will also prepare a **commentary** on the final evaluation report, which presents the EO ratings of the project based on a careful review of the evidence collated by the evaluation team and the internal consistency of the report. These ratings are the final ratings that the UNEP Evaluation Office will submit to the GEF Office of Evaluation.

Resources and Schedule of the Evaluation

68. This Mid-term Evaluation will be undertaken by an independent evaluation consultant contracted by the UNEP Evaluation Office. The consultant will work under the overall supervision of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultant's individual responsibility to arrange for his/her travel, obtain documentary evidence, meetings with stakeholders, field visits, and any other logistical matters related to their assignment. The UNEP Task Manager, ProEcoServ Project Manager and Executing Agencies of the pilot countries will provide logistical support (introductions, meetings, transport, lodging etc.) for the country visits where necessary, allowing the consultants to conduct the evaluation as efficiently and independently as possible.

69. The **contract for the consultant** will commence on 14th March 2013 and end on 27th June 2013 (10.5 weeks spread over a period of 15 weeks). (S)He will travel to Nairobi (in March 2013), and to Viet Nam (April 2013), Trinidad&Tobago (April 2013) and Chile (April-May 2013). The consultant will also attend the second project Steering Committee meeting in Chile from 8th to 10th May 2013 to meet all the project team, and present and discuss initial findings and recommendations of the MTE. The consultant will submit a draft evaluation report by the 31st May 2013.

Schedule of Payment

70. One of the following two contract options will be used:

71. Lump-Sum Option:

- The evaluator will receive an initial payment covering the travel costs upon signature of the contract. A further 40% will be paid upon acceptance of the draft report. A final payment of 60% will be made upon satisfactory completion of work. The fee is payable under the individual Special Service Agreement (SSA) of the evaluator and is **inclusive** of all expenses such as travel, accommodation and incidental expenses.

72. Fee-only Option

- The evaluator will receive an initial payment of 40% of the total amount due upon acceptance of the draft report. Final payment of 60% will be made upon acceptance and satisfactory completion of work.

The fee is payable under the individual SSAs of the evaluator and is **NOT** inclusive of all expenses such as travel, accommodation and incidental expenses. Ticket and DSA will be paid separately.

73. In case the consultant is not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultants have improved the deliverables to meet UNEP's quality standards.

74. If the consultant fails to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants' fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.

4.2 Annex 2: Evaluation program

Table x: Meeting schedule - Nairobi 19-21 March

Date / time	Person meeting	Role / location of meeting
Tuesday 19th March (pm)	14.00 – 15.00 Tiina Piironen & Segbedzi Norgbey	Evaluations Office Chief, Evaluations Office
	15.00 – 16.00 Edoardo Zandri Shakira Khawaja	GEF Oversight Team
	16.00-17.00 Ersin Esen	Project Manager
Wednesday 20th March	9.00 -10.00 Didier Salzman	UNDP/DEPI. Fund Manager Officer
	10.00 – 12.00 Mia Turner	Division of Regional Cooperation
	11.00-12.00 Beth Mbote Akpezi Ogbuigwe	Project Implementation Team
	<i>12.00-13.00</i> Lunch	
	<i>14.00-15.00</i> Shakira Khawaja	GEF Oversight Team
	<i>15.00-16.00</i> Pushpam Kumar	Chief, DEPI
Thursday 21 March	<i>9.00-10.00</i> Andrew Ghitongo	Financial management / disbursements
	<i>10.00-11.00</i> Makiko Yashiro	Project Implementation Team
	<i>11.00-12.00</i> Akpezi Ogbuigwe	Ecosystem Management Sub Program Coordinator
	<i>12.00 -13.00</i> Lunch	
	<i>14.00-15.00</i> Alex Forbes	PEI
	<i>15.00-16.00</i> Tiina Piironen, Ersin Esen & Edoardo Zandri	Wrap up meeting

Meeting schedule - Trinidad & Tobago 31 March – 6 April

Date / time		Person meeting	Role/ Location
Monday 1 April	9.30-3.30	Meeting with T&T Technical Team	Cropper Foundation Meeting Room
Tuesday 2 April	9:00 a.m.	Dr. Asad Mohammed, Ms. Marie Hinds & Professor John Agard	National steering Committee members for the National Spatial Development Plan UWI
	1:30 p.m.	Mr. Richard Laydoo	The Programme Coordinator of the Green Fund Unit, Level 7, Tower C, Waterfront Complex
	2.30 pm	Mrs. Vidiah Ramkhelewan	The Permanent Secretary of the Ministry of Environment and Water Resources,
	4:00 p.m.	Professor Patrick Watson	Sir Arthur Lewis Institute for Social and Economic Studies (SALISES)
Wednesday 3 April	7:00 – 12:30	Site visit to Nariva project site	
	3:30 p.m.	Alexander Girvan	Economics Consultant
	4.30	Keisha Garcia	xxx
Thursday 4 April	8 am	Professor John Agard	xxx
	9 am	Professor Patrick Watson	Sir Arthur Lewis Institute for Social and Economic Studies (SALISES)
	9.30 – 11:30	Project steering committee meeting	Department of Life Sciences Conference room, UWI
	12:00 – 4:00 p.m.	Site visit to Caura Community, Northern Range: Dr. Shango Alamu Yolande Youk See (Vice-President of Village Council) Malakai Joseph (Village Council Member) Venorica Sylvester (President – Village Council)	Caura Community Centre and surroundings
Friday 5 April	All day	Stakeholder workshop – Buccoo project site	Buccoo Integrated Facility - Tobago
		Sarah McIntosh	Communications consultant

Meeting between the T&T Technical Team and the Project Evaluation Team

Monday 1st April 2013, 9:30 a.m. – 12:30 p.m.

Venue: The Cropper Foundation Meeting Room

The objective of the meeting is to create an opportunity for interaction and exchange between the T&T ProEcoServ technical team, and the ProEcoServ Project Evaluation team.

Proposed Meeting Agenda

1. Welcome and Opening Remarks (*John Agard*) 5 mins

2. Expectations of the mid-term evaluation process (*Ersin Esen and Camille Bann*)
3. Introduction to the Trinidad and Tobago component of ProEcoServ (*John Agard*)
 - Objectives and main deliverables
 - Main achievements to date
 - Main challenges & proposed solutions for overcoming them
 -
4. Presentation on Project Management elements (*Keisha Garcia*)
 - Work programme & Budget
 - Main project management challenges and proposed solutions
5. Presentations on each of the project sites:
 - Buccoo (*Jahson Alemu I*)
 - Northern Range (*Maurice Rawlins*)
 - Nariva (*Lena Dempewolf and Anton Manoo*)
6. Presentation on the economic components of ProEcoServTT (*Alexander Girvan*)
7. Overview of the communication and outreach strategies and activities in ProEcoServTT (*Sarah McIntosh*)
8. Discussion
9. Closing remarks

Meeting Schedule. Viet Nam, 15th – 19th April 2013

Day	Content	Remark
Tuesday 16 th April		
9:00 – 10:30	Meeting with Project Management Unit (PMU)	Mrs. Kim Thi Thuy Ngoc, Project Manager Project for Ecosystem Services
10:30 – 11:30	Meeting with to MONRE discuss on mainstreaming of ES in National Strategy for Environmental Protection to 2020, vision to 2030	Dr. Nguyen Trung Thang, Deputy Director General ISPONRE/MONRE
13:30 -14:30	Meeting with WWF on collaboration of ProEcoServ with other initiatives	Mr. Hoang Viet, Freshwater and CC program coordinator
15:00 – 16:00	Meeting with MPI Discuss on mainstreaming of natural capital on national green growth strategy	Ms. Nguyen Dieu Trinh, Official. Dept. of Science, Education, Natural Resources and Environment Ministry of Planning and Investment
Wednesday 17 th April		
9:00 – 10:30	Meeting with WB on collaboration of ProEcoServ with WAVES	Ms. Laura Altinger, Senior Environmental Economist
13:30 – 14:30	Meeting with GIS consultant to update the project's output	Tran Trung Kien, GIS Consultant
Thursday 18 th April		
9:00 – 11:00	Meeting with Department of Natural Resources and Environment (DONRE) in Ca Mau	Mr. Ngo Chi Hung – Ca Mau's DONRE
14:00 – 16:00	Meeting with related stakeholders in Ca Mau -	Ca Mau's PPC - Department of Agriculture and Rural Development (DARD) - Ca Mau National Board
Friday 20 th April	Site visit in Ca Mau National Park and Ca Mau's cape	Mr. Ngo Chi Hung – Ca Mau's DONRE

AGENDA Chile, 2-7 May, 2013

MEETINGS IN SANTIAGO CITY

Day	Meeting	Time
Thursday May 2nd, 2013	Mrs. Ximena George-Nascimento, Ministry of Environment	10:00
Thursday May 2nd, 2013	Mr. Edmundo Claro, Project consultant Mt Joaquin Salas, Project Consultant, CEAZA	11:45 13.00

MEETINGS IN ANTOFAGASTA CITY

Day	Meeting	Time
Friday May 3rd, 2013	Mr. Hugo Thenoux, Environmental Ministerial Secretary & Jimena Ibarra (Regional Co-ordinator, ProEcoServ) Jimena Ibarra – Regional Co-ordinator	9:00 A.M
Friday May 3rd, 2013	Karen Christie, SERNATUR, Antofagasta	11:00 A.M
Friday May 3rd, 2013	Mr. Norberto Portillos, Head of General Water Direction (Dirección General de Aguas (DGA) Antofagasta.	15:00 hrs. P.M

MEETINGS IN SAN PEDRO DE ATACAMA

Day	Meeting	Time
Monday May 6	Meeting with Local Coordinator, Mr. Antonio Cruz	10:30
Tuesday May 7	Meeting with Mrs. Sonia Salas, National Director ProEcoServ	10:00 – 11.00
	Andres Bodini, CEAZA	14.15-15.00
	Meeting with Ms. Lorena Bugueño. Communications ProEcoServ	15:00/15:45
	Meeting with Ms. Sandra Berna, Mayor of the Municipality of San Pedro de Atacama. and, Mr Diego Aramayo, Environmental Department of the Municipality of San Pedro de Atacama	16:00
	Belinda Reyers, National Co-ordinator, ProEcoServ South Africa	18.00
Friday 10 May	Rosimeiry Portela, Coonservation International	

Other:

Mr Mervyn Lotter, Acting Manager, Biodiversity Planning, Mpumalanga Tourism and Parks Agency, South Africa (via email)

Mr Uli Piest – Consultant for Project Document and interim Project Manager ProEcoSsrv (via skype & email)

Ms Belinda Reyers, National Co-ordinator, ProEcoServ South Africa (via email)

4.3 Annex 3: Bibliography

Project documents

Project Document. Project for Ecosystem Services

Project for Ecosystem Services, 2011. Communications Strategy. 15 December 2011

Project for Ecosystem Services – Fact Sheet

Project Progress reports

Project for Ecosystem Services, Proecoserv, Half Yearly Progress Report July 2011 - 31 December 2010

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Project for Ecosystem Services. Semi-Annual Report # 1 Country: Trinidad and Tobago. Reporting Period: January 1st 2011 to June 30th 2011

Project for Ecosystem Services Semi-Annual Report # 3 Country: Trinidad and Tobago. Reporting Period: January 1st 2012 – June 30th 2012

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January 2013. Coastal Vulnerability Model.

2012. Overview of Ecosystem Services in Ca Mau

2012. Report on Direct and Indirect Drivers for Changing Ecosystems

2012. Relationships between Drivers and Supply Functions of Ecosystem Services

2012 Scenario Development: International Experiences and Lesson Learnt for Viet Nam

2012 Analysis of valuation methods for Ecosystem Services

2012 Communications Strategy in Viet Nam

2012 Overview of Financial Incentives in the Legislation and Policy Framework on Wetland management in Viet Nam

2012 Report on International Experiences of Pro-Poor Economic and Financial Incentives for Sustaining Ecosystem Services

2012 Review of Planning Process at National & Provincial Level to Identify Entry Points for Mainstreaming of Ecosystem Services

South Africa

An Introduction to Ecosystem Services – power point presentation

Freshwater ecosystem services mapping: Concept and examples from South Africa. 24 May 2012. Jeane Nel, Nancy Job, Patrick O'Farrell, Lindie Smith Adao, CSIR. Power point presentation

Progress on Mapping Ecosystem Services, 27 September 2012. Power point presentation.

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Identification of the windows of opportunity and gasps through which instruments can be integrated in the decision making process. Activity: 2.2.1.2 Identify windows of opportunity and gasps through which ecosystem services instruments (Example PES, DSS) can be integrated into decision-making processes. June 2012. Prepared by: Edmundo Claro

Actividad 2.2.1.3. Estrategia de participación e involucramiento con instrumentos legales y regulatorios a escala local y regional

Identification of existing and planned financial incentives for the provision of ES in San Pedro de Atacama. Activity: 2.2.2.1 Identify and assess existing and planned financial incentives in the country, region and municipality; include the identificación of other relevant incentive initiatives. March 2012. Prepared by: Edmundo Claro.

Actividad 2.2.2.2. Análisis de viabilidad para los incentivos financieros identificados con potencial para promover la provisión de se en san pedro de atacama

Maps and valuation of ecosystem services used to inform macroeconomic and sectoral planning. Activity: 2.2.3.1 Identify and evaluate current instruments (used within macroeconomic and sectoral

planning) for the integration of ecosystem services. Chile. June 2012. Prepared by: Cristian Geldes & Ceaza Team.

Other

UNEP, 2011. Integration of GEF Operations in UNEP: Accountability Framework for Directly Executed GEF projects.

UNEP, 2012. Operational Guideline for implementing the Accountability Framework for Internally Executed GEF projects.

4.4 Annex 4: Assessment of the Quality of Project Design

Question	Evaluation Comments	Ref in project document.	
Relevance			
Are the intended results likely to contribute to UNEP's Expected Accomplishments and programmatic objectives?	Ecosystem management is one of the thematic areas for the programme of work of UNEP for 2010-2011, and UNEP/DEPI is in charge of coordinating the planning and implementation of this sub-programme 3 on ecosystem management for 2010-2011.	Section 4	
Does the project form a coherent part of a UNEP-approved programme framework?	ProEcoServ will be one of the core activities to be implemented under sub-programme 3.	Section 4	
Is there complementarity with other UNEP projects, planned and ongoing?	Yes there is strong complementarity with other UNEP projects. For example, MA follow up and GLOBE, and other initiatives of UNEP/DEPI set out in Appendix 17	Appendix 17	
Are the project's objectives and implementation strategies consistent with:	i) Sub-regional environmental issues and needs?	Yes, the project has a strong focus on the sub-regional issues through the pilot studies, which are building on SGA at the pilot sites	Section 2.1
	ii) the UNEP mandate and policies at the time of design and implementation?	Yes	
	iv) Stakeholder priorities and needs?	A project objective is to build local and national stakeholders' views into the decision making process. The project's implementation strategy includes significant stakeholder involvement	
Overall rating for Relevance		Highly Satisfactory	
Intended Results and Causality			
Are the objectives realistic?	Strategic Objective: To contribute to the use of ecosystems services, piloted by the MEA, in mainstreaming biodiversity conservation and ecosystem	Section 3	

Question	Evaluation Comments	Ref in project document.
	<p>services and poverty reduction and sustainable development planning</p> <p>Project Objective – Reduce threats to globally important biodiversity through integrating the findings and tools of ecosystem service assessments in policy and decision making.</p> <p>Yes, the project objectives are realistic and highly relevant / important</p>	
<p>Are the causal pathways from project outputs [goods and services] through outcomes [changes in stakeholder behaviour] towards impacts clearly and convincingly described? Is there a clearly presented Theory of Change or intervention logic for the project?</p>	<p>A problem with assessing this is that the project document uses different terminology to the ROTI, and it is not always straightforward to map the two. However, based on the Logical Framework it has been possible to draft the RotI as presented in Section 4 of this report.</p> <p>Furthermore, narrative on the Theory of Change / Intervention logic is provided in various places in the project document. For example, ‘ By building on existing capacity developed during the MA and working at specific sites that were already involved in the MA, there is a high likelihood that the application of decision and policy support tools will result in tangible global environmental benefits. The development and testing of policy support tools as well as the close engagement of policy makers will equally provide important lessons on how to mainstream biodiversity conservation and ecosystem management into sectoral policies and development processes, well beyond the pilot countries’.</p>	<p>Section 3.1</p>
<p>Is the timeframe realistic? What is the likelihood that the anticipated project outcomes can be achieved within the stated duration of the project?</p>	<p>The project timeframe is 4 years. The project involves the development of scientific and socio, economic support tools and the influencing of decisions. Awareness raising is a key part of the process. The delivery of the project within the timeframe depends on the successful development and acceptance of the support tools and the availability of timely opportunities influence policies. Delivery of the project is therefore contingent on the ability to generate enough data to run the tools effectively and provide convincing evidence to decision makers, and the identification of decision makers to champion the findings, across the pilot sites and internationally.</p>	

Question	Evaluation Comments	Ref in project document.
Are the activities designed within the project likely to produce their intended results	Yes, if successful	Logical framework
Are activities appropriate to produce outputs?	Yes they are, but there are a large number of activities, many of which are dependent on data, expert input to execute cutting edge research approaches, and stakeholder consultation and could be time consuming and complex to deliver	
Are activities appropriate to drive change along the intended causal pathway(s)	Yes, there is a clear link from activities to outputs and outcomes	Logical framework
Are impact drivers, assumptions and the roles and capacities of key actors and stakeholders clearly described for each key causal pathway?	<p>The Logical framework includes assumptions but not impact drivers.</p> <p>The project document goes into some detail on the capabilities of the key actors, and stakeholders are a key part of the implementation process (delivery of activities)</p>	Logical framework
Overall rating for Intended Results and causality	Satisfactory	
Efficiency		
Are any cost- or time-saving measures proposed to bring the project to a successful conclusion within its programmed budget and timeframe?	<p>Cost-effectiveness measures include:</p> <ul style="list-style-type: none"> • Building on existing programmes and grassroots efforts at the national and international level; • Building on prior experience and data generated through the SGAs; • Using national demonstration projects in well-established institutions to (a) contribute to the conservation of globally important ecosystems in the project areas of intervention, and (b) provide a solid contribution, based on good examples of practical ES applications to decision making, to the ongoing global dialogue on how to improve the science-policy interface for a better uptake of ES considerations into political decision making ; • Harmonising activities and creating synergies with the MA Follow-up Network (with UNEP/DEPI and several project partners being involved in both processes); and 	Section 7.3

Question	Evaluation Comments	Ref in project document.
	<ul style="list-style-type: none"> Targeting a broad range of stakeholders through existing national and global networks, so as that maximise impacts at various governmental and societal levels 	
<p>Does the project intend to make use of / build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency?</p>	<p>The project aims to build on the Sub Global Assessments in the pilot countries. For example in South Africa – the Southern African Millennium Ecosystem Assessment (SAfMA) (Jaarsveld et al. 2005; Biggs et al. 2004; Scholes & Biggs 2004) especially the Gariep Basin Assessment (Bohensky et al. 2004) and the lessons learnt during these projects. Viet Nam – the ‘Downstream Mekong River Wetlands Ecosystem Assessment in Viet Nam’</p> <p>In South Africa and Lesotho the project design comprises two existing projects, which are beginning to address some of the gaps identified – The National Grassland Program and the Eden District Municipality (EDM). Other programs offering potential opportunities for mainstreaming are the public funded poverty relief programs (Working for Water, Working for Wetlands and Working for Woodlands), and public-private partnership being pioneered by WWF (a project member)</p> <p>Synergies with on-going activities are identified in Chile.</p> <p>In Trinidad and Tobago, ‘the Green Fund ‘provides a unique opportunity to refine the project criteria to be more proactive and engage vulnerable communities in a payment for ecosystem services system to be funded by the Green Fund’. Further, The Government of Trinidad and Tobago through the Ministry of Planning, Housing and the Environment (MPH&E) is about to initiate the development of a new National Physical Development Plan to be made pursuant to the Town and Country Planning Act (1968). The proposed project has the potential to offer a spatial based ecosystem services planning model, which can be mapped onto the macroeconomic planning framework. (opportunity for mainstreaming)</p> <p>The consistency of the project with national priorities and plans is set out in detail in Section 3.6 of the project document</p>	<p>Section 2.6 & Section 3.6</p>

Question	Evaluation Comments	Ref in project document.
Overall rating for Efficiency	[Highly] Satisfactory	
Sustainability / Replication and Catalytic effects		
Does the project design present a strategy / approach to sustaining outcomes / benefits?	<p>Component 2 of the project - awareness raising, dissemination and outreach, is considered to be key to the sustainability of project's tools and findings. For example, in Trinidad and Tobago it is proposed that key stakeholder organisations from the public and private sectors be members of the Advisory Committee, to encourage sustainability of the project's outputs.</p> <p>Component 3 – aims to contribute to strengthened science-policy interface for ecosystem conscious policy making at the international level, further ensuring the sustainability of the projects outcomes</p>	Section 3.3
Does the design identify the social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Does the design foresee sufficient activities to promote government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project?	Socio and political factors identified in some case . For example in South Africa 'policy environment presents opportunities for mainstreaming ecosystem services into policies (e.g. the National Biodiversity and Water Acts and National Framework of Sustainable Development), but there are still constrains e.g. perceived divide between socio-economic development and sustainable ecosystem management'.	Section 2.6
If funding is required to sustain project outcomes and benefits, does the design propose adequate measures / mechanisms to secure this funding?	Not discussed in project document	
Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?	Not identified project document	
Does the project design adequately describe the institutional frameworks, governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustain project results?	Not described in detail, will be elaborated on as part of the project implementation	
Does the project design identify environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which,	Not discussed	

Question	Evaluation Comments	Ref in project document.	
in turn, might affect sustainability of project benefits?			
Does the project design foresee adequate measures to catalyze behavioural changes in terms of use and application by the relevant stakeholders of (e.g.):	i) technologies and approaches showcased by the demonstration projects;	Yes, key part of the project (component 1)	Logical framework
	ii) strategic programmes and plans developed	Yes, mainstreaming of ES is a key part of the project (component 2)	Logical Framework
	iii) assessment, monitoring and management systems established at a national and sub-regional level	Yes, key part of the project	Logical Framework
Does the project design foresee adequate measures to contribute to institutional changes? [An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in any regional or national demonstration projects]	Yes, this is focus of component 2 of the project	Logical Framework	
Does the project design foresee adequate measures to contribute to policy changes (on paper and in implementation of policy)?	This is the ultimate goal of the project. That is not only to produce reports / sound scientific and economic evidence, but to get that evidence reflected into decisions and sub national, national and international scale. The project seeks to identify the best opportunities for realizing this.		
Does the project design foresee adequate measures to contribute to sustain follow-on financing (catalytic financing) from Governments or other donors?	Not discussed in project document		
Does the project design foresee adequate measures to create opportunities for particular individuals or institutions (“champions”) to catalyze change (without which the project would not achieve all of its results)?	The project will seek to identify and follow through on opportunities for the mainstreaming of ES into decision making at the pilot sites. In some cases ‘champions’ have already been identified, such as The Green Fund in Trinidad and Tobago		
Are the planned activities likely to generate the level of ownership by the main national and regional stakeholders necessary to allow for the project results to be sustained?	Working very closely with key institutions should ensure ownership and is vital to the success of the project		

Question	Evaluation Comments	Ref in project document.
Overall rating for Sustainability / Replication and Catalytic effects	[Moderately] Satisfactory	
Risk identification and Social Safeguards		
Are critical risks appropriately addressed?	<p>Risks / risk Level and mitigation measures are set out in the project document.</p> <p>Risks include:</p> <ul style="list-style-type: none"> • Impact of climate change on ecosystem services (Not clear of risk to project or mitigation measure) • Reduced commitment to EM, ES and PES due to change in Government • Weak institutional capabilities • Lack of co-ordination between different stakeholders • Ecosystem management is not applied or integrated into policy frameworks • Weak uptake of ecosystem services in international biodiversity related platforms and processes • Negative impacts in other focal areas 	3.5
Are assumptions properly specified as factors affecting achievement of project results that are beyond the control of the project?	<p>Yes. Project assumptions include:</p> <ul style="list-style-type: none"> • There will be a continuous organisational support for the mainstreaming of ecosystem services into national planning and policy processes, including stable mandates and responsibilities of the targeted institutions at national levels. • Key stakeholders are willing to engage with ProEcoServe • There is the political will to foster reforms • Ecosystem services approaches continue to receive high attention in relevant international processes, facilitating replication and up-scaling of the project approach • Negative environmental impacts in other focal areas • Negative socio-political impacts 	3.4

Question	Evaluation Comments	Ref in project document.
Are potentially negative environmental, economic and social impacts of projects identified	<p>Not identified as such, but noted as project risk. The fact that ESA involves a holistic approach and that the project is seeking to illuminate trade-offs should mean that negative environmental and social impacts are identified.</p> <p>Socio-political safeguards and gender concerns were addressed during the stakeholder mapping and engagement process</p>	3.5
Overall rating for Risk identification and Social Safeguards	Satisfactory	
Governance and Supervision Arrangements		
Is the project governance model comprehensive, clear and appropriate?	<p>Yes</p> <p>UNEP -DEPI's Ecosystem Services Unit are well placed to execute the project given their expertise in this area and highly relevant on-going initiatives such as co-ordination of the MA follow up and involvement in the Intergovernmental science-policy platform on biodiversity and ecosystem services (IPBES)</p>	<p>Section 4</p> <p>Appendix 10 - organograms</p>
Are roles and responsibilities clearly defined?	<p>Yes. UNEP/DEPI is responsible for all aspects of project execution, while UNEP/DGEF as the GEF Implementing Agency will have a supervisory and oversight role, formally participating in the Project's Steering Committee meetings, organising external evaluations with UNEP's external Evaluation and Oversight Unit, reviewing and clearing semi-annual technical and financial reports and the annual PIR (Programme Implementation Reports) for the GEF. UNEP/DGEF will also seek to ensure synergies and cross-fertilisation between ProEcoServ and other similar UNEP GEF projects.</p> <p>The project will establish a Steering Committee (SC), supported by Project Management team that will act as a Secretariat to the SC. The Steering Committee (SC) will be composed of UNEP/DEPI, UNEP/DGEF as well as (a) representatives from the national executing agencies from each of the countries, i.e. CEAZA (Chile), CSIR (South Africa and Lesotho), UWI (Trinidad and Tobago) and ISPONRE (Viet Nam), and (b) external experts with relevant experience in ES studies, MA sub-global assessments and</p>	<p>Section 4</p> <p>Appendix 11 – TOR for Global PM; National PMs & Steering Committee;</p>

Question	Evaluation Comments	Ref in project document.
	<p>economic valuation worldwide, identified through UNEP/DEPI's international network.</p> <p>SC functions will mainly be to provide overall project oversight, to evaluate the progress of the project relative to the products expected, to provide strategic directions for the implementation of the project – both at national and global level – and to maintain and promote the necessary inter-institutional coordination outside of the project, so as to promote the dissemination and adoption of ProEcoServ findings. TOR for SC provided in Appendix 11 of project document.</p> <p>Project Manager, will be responsible for overall project management and all day-to-day operational, technical, reporting, administrative and financial aspects of the project.</p>	
Are supervision / oversight arrangements clear and appropriate?	Project supervision will take an adaptive management approach. The UNEP DGEF Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop . The emphasis of the UNEP DGEF supervision will be on outcome monitoring, as well as project financial management and implementation monitoring.	Section 6
Overall rating for Governance and Supervision Arrangements	Satisfactory	
Management, Execution and Partnership Arrangements		
Have the capacities of partner been adequately assessed?	Yes	section 4 and Appendix 10
Are the execution arrangements clear?	Yes	section 4
Are the roles and responsibilities of internal and external partners properly specified?	<p>Largely – or will be done so at implementation stage.</p> <p>Chile - High level responsibilities of project partners set out in Table 5. To be developed through TOR in some cases (e.g. CEAZA, TOR still to be reviewed), and in other cases consultants to be identified at project</p>	

Question	Evaluation Comments	Ref in project document.
	<p>implementation stage (e.g. Hydrological consultants). Advisory and SG to be set up</p> <p>South Africa – will establish a national SG – termed the User Advisory Group, to include a small team of technical advisors</p> <p>Vietnam – Project Steering Committee (Chaired by the Vice Minister of MONRE), Project Management Unit, Technical Working Groups</p>	
Overall rating for Management, Execution and Partnership Arrangements	Satisfactory	
Financial Planning / budgeting		
Are there any obvious deficiencies in the budgets / financial planning	No	
Cost effectiveness of proposed resource utilization as described in project budgets and viability in respect of resource mobilization potential	<p>Cost effectiveness discussed</p> <p>Key financial parameters will be monitored semi-annually to ensure cost-effective use of financial resources</p>	Section 7.3
Financial and administrative arrangements including flows of funds are clearly described	Not set out in project document	
Overall rating for Financial Planning / budgeting	Moderately Satisfactory	
Monitoring		
<p>Does the logical framework:</p> <ul style="list-style-type: none"> • capture the key elements in the Theory of Change for the project? • have ‘SMART’ indicators for outcomes and objectives? • have appropriate 'means of verification' • adequately identify assumptions 	<p>The Project Results Framework presented in Appendix 4 includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Appendix 6 will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarised in Appendix 7. Other</p>	Appendices – 4, 6 & 7

Question	Evaluation Comments	Ref in project document.
	M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.	
Are the milestones and performance indicators appropriate and sufficient to foster management towards outcomes and higher level objectives?	Yes	
Is there baseline information in relation to key performance indicators?	At the time of project approval approximately 70% of baseline data is available. Baseline data gaps will be addressed during the first year of project implementation, particularly in Viet Nam. A plan for collecting the necessary baseline data is presented in Appendix 7. The main aspects for which additional information are needed are ecosystem data in the respective pilot sites, as well as opportunities and gaps in national policy and regulatory instruments as entry points for mainstreaming ecosystem services.	Section 6
Has the method for the baseline data collection been explained?	No	
Has the desired level of achievement (targets) been specified for indicators of Outcomes and are targets based on a reasoned estimate of baseline?	Yes	Appendix 7
Has the time frame for monitoring activities been specified?	Yes	Appendix 7
Are the organisational arrangements for project level progress monitoring clearly specified	Yes [Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners UNEP/DEPI and UNEP DGEF. Risk assessment and rating is an integral part of the Project Implementation Review (PIR) prepared by the UNEP/DEPI project team in collaboration with project partners and UNEP DGEF, for submission to the GEF Secretariat on an annual basis. The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR process. Key financial parameters will be monitored semi-annually to ensure cost-effective use of financial resources].	

Question	Evaluation Comments	Ref in project document.
Has a budget been allocated for monitoring project progress in implementation against outputs and outcomes?	Yes – total M&E budget is USD300,000	
Overall, is the approach to monitoring progress and performance within the project adequate?	<p>Yes</p> <p>Appendix 8 sets out reporting requirements and responsibilities</p> <p>The GEF Tracking tool has been adapted for each in-country component of the project in order to reflect the specificities of each sub project. The first application of the tool was completed at project design phase.</p>	Appendices 8 & 15
Overall rating for Monitoring	Satisfactory	
Evaluation		
Is there an adequate plan for evaluation?	Yes	Section 6
Has the time frame for Evaluation activities been specified?	Yes	
Is there an explicit budget provision for Terminal and Mid Term evaluation?	Yes, and for the Mid Term Evaluation	
Is the budget sufficient?	Yes	
Overall rating for Evaluation	Satisfactory	

4.5 Annex 5: CV of Consultant

Dr Camille Bann

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Tel: 07553 380163

I am an economist with over twenty years of experience working in the area of environmental policy and regulation. My expertise is in the valuation of natural resources, project and policy appraisal and financing mechanisms. I have worked in a number of policy areas and sectors (e.g. water, climate change, ecosystem services, protected areas, agriculture, forestry, industry) across 30 countries. Prior to becoming a freelance consultant in June 2009 I was Head of Environmental Economics at Jacobs UK Ltd where I managed a team of nine economists, and led on over 20 projects. Before this I was Principal Economist at the Environment Agency for England and Wales leading on Water Framework Directive economic appraisal. From 1993 to 2003 I worked as a freelance consultant with a focus on South East Asia for range of private, public, academic and third sector clients. I also worked for a number of years for a policy research group – The Centre for Social and Economic Research on the Global Environment at University College London, whose remit covered climate change and biodiversity. I hold a PhD in Economics from University College London.

Experience Record

June 2009- present

Independent Consultant

Pilot Program for Climate Resilience. Learning Lessons from ‘Phase 1’ for Developing Strategic Investment Frameworks for Climate Resilient Development. World Bank. Lead Consultant

Strategic Environmental Assessment (SEA) for Industry Sector in Himachal Pradesh, India. World Bank. Environmental Economist / Policy Analyst

Mid-term Evaluation of the UNEP/GEF project ‘ Project for Ecosystem Services’ (South Africa, Lesotho, Trinidad and Tobago, Viet Nam and Chile). UNEP. Evaluator.

Cost Benefit Assessments for Catchment Management Schemes in Surface Water Catchments. Seven Trent Water Ltd. Lead economist (with ESI Ltd).

Adur and Ouse pilot programme evaluation. The Environment Agency of England and Wales. Lead economist (with eftec).

Measuring the results of Climate Change Support in Mozambique. World Bank. International Expert

UNDP/GEF CBPF – Main Streams of Life Wetland PA System Strengthening for Biodiversity Conservation, China. Eco-compensation and Ecosystem Valuation Specialist, Programme Document Formulation

UNDP-UNEP Poverty and Environment Initiative Armenia. International Consultant on Economic Valuation of Ecosystem Services. Economic study on Mining.

Terminal Evaluation of Project: Strengthening National Institutional Capacities for Mainstreaming Environmental Agreements (MEAs) into National Poverty Reduction Strategies in South Sudan and Lao PDR. UNEP. Evaluator.

UNDP-GEF Project ‘Improving the Financial Sustainability of the Carpathian System of Protected Areas’. UNDP.PA Ecosystem Valuation Review Expert.

Energy and Agriculture for a Sustainable Future in the Western Balkans. Henrich Boll Stiftung. Peer Reviewer.

Poverty-Environment Initiative of UNDP Communities Programme, Tajikistan. Economic study of land degradation. UNDP. Lead Economist.

Evaluation of the Poverty and Environment Initiative in Lao PDR and recommendations for possible next phase. - UNDP. Evaluator.

AMP5 Restoring Sustainable Abstraction Investigations and Environmental Monitoring Program. Seven Trent Water Ltd. Lead economist (ESI Ltd led consortium)

Independent Technical Review of the Strategic Program for Climate Resilience of Mozambique. World Bank. Peer Reviewer

GEF Project Document Formulation for the Government of Malaysia – United Nations Development Programme / Global Environment Facility Funded Project ‘Biodiversity Conservation in Multi-Use Forest Landscape in Sabah, Malaysia’. Environmental Economist.

Strengthening Protected Area Network of Turkey: Catalyzing Sustainability of Marine and Coastal Protected Areas. UNDP/GEF. International Environmental Economy and Management Expert

Southern African Development Community (SADC) Groundwater and Drought Management Project: Valuation of Groundwater. World Bank. Lead economist (Atkins /eftec consortium).

Terminal Evaluation of the UNEP GEF project: International Commission on Land Use Change and Ecosystems. United Nations Environment Programme. Lead Evaluator.

Economic Valuation Tools for Wetlands in Nepal. UNDP/GEF. Team Leader.

Preparation of Cambodia’s Second National Communication to the UNFCCC.UNDP. Lead Consultant.

Biodiversity and Ecosystem Services: Why these are important for sustained growth and equity in Latin America and the Caribbean. UNDP. Sector Coordinator (Phase II) Agriculture.

Dhaka, Bangladesh, Environment and Water Program Project. The World Bank. Economic and financial analysis of proposed industrial wastewater demonstration project.

Review of Cost-Benefit Analysis and Benefit Valuation. UK Water Industry Research Limited. Member of eftec team (Cascade, ICS Consulting and eftec consortium)

Impact Assessments of Proposed Marine Special Areas of Conservation (SAC) in the UK. Joint Nature Conservation Committee (JNCC).Reviewer for eftec.

Global Environment Facility, Medium-Sized project: Enhancing Coverage & Management Effectiveness of the Subsystem of Forest Protected Areas in Turkey’s National System of Protected Areas. United Nations Development Program. Protected Area Sustainable Finance Expert.

Environment Agency Better Regulation Team. Support to the Environment Agency on the economics of Better Regulation.

The Benefits of Inland Waterways Phase 2, IWAC/Defra. Project Director. Testing of benefits assessment guidance developed in Phase 1 on selected case studies.

Thames Weir Environmental Prioritisation – with Jacobs for the Environment Agency

Eastern European/Central Asian Training Workshop on assessing and valuing benefits of protected areas, International Academy for Nature Conservation, Germany/WWF. Seminar on sustainable financing of protected areas.

Sept 2006 to June 2009 Head of Environmental Economics - Jacobs UK Ltd

Selected Project Experience

The Benefits of Inland Waterways- IWAC/Defra. Project Director. Study to identify the range of benefits provided by inland waterways in England and Wales using an Ecosystem Services Approach.

Cost Benefit Analysis of Low Head Hydropower – Environment Agency. Project Director. Development of a framework to be used to assess the viability of low head hydro power schemes in England and Wales.

Provision of advice in relation to the application of Article 4.7 of the Water Framework Directive to RWE npower PLC – REW npower PLC. Scoping note and advice provided for two potential hydro-electric power sites.

Environmental and Social Costs and Benefits of Demand Management Options – Technical Lead- Thames Water. Development of environmental and social cost benefit estimates of AMP5 leakage reduction and demand management options, and development of the decision making framework for the Water Resource Management Plan.

Impact Assessment of seven draft River Basin Management Plans – Project Director – The Environment Agency. Working with the Environment Agency to deliver the Impact Assessment required for the Draft River Basin Management Plan under the Water Framework Directive.

Assessing the costs of 2007 floods: Implications for Flood Risk Management Appraisal – Lead Economist - The Environment Agency. Review of evidence on the impacts of the 2007 floods so as to identify any gaps or improvements needed in the current PAG appraisal methods used for flood risk management schemes in the light of climate change

Alternative Ways to Allocate Water – Project Director – The Environment Agency. This project identified different options for making water available for abstractors whilst protecting the environment taking into account water availability and climate change. The project involves a review of the pro and cons of the current ‘first come, first served’ system, a review of allocation approaches used in other countries, and recommendations on ideas suitable for England and Wales.

Assessment of the Economic Value of England's Terrestrial Ecosystem Services, Project Director, Defra, Assessment of the total value of England’s terrestrial ecosystem services. The study developed a typology of benefits related to ecosystem services and a methodology for combining, aggregating and dis-aggregating different types of values, at different temporal and spatial scales. Forest carbon benefits were considered as part of this project.

Environmental Accounts for Agriculture, Project Director, Defra. Update of the UK environmental accounts for the agricultural sector taking into account both the positive and negative impacts of agriculture on the environment (e.g. impacts to landscapes, biodiversity, water bodies, climate change and air quality considered).. The study considered the conceptual issues around how the estimates are constructed and used and scoped out a time-series methodology.

Expert Witness (Economics) for Environment Agency in Inquiry relating to United Utilities appeal against discharge consents

Environmental and Social Costing for Water Resource Plan – Project Director – A Water Company. Development and application of a screening tool to all ‘schemes’ to be considered as part of the Water Resource Plan. The environmental and social impacts (positive and negative) of the screened water resource schemes were assessed. A wide range of environmental and social impacts are considered within this project including water quantity and quality, recreation, biodiversity, visual impacts, social /public disamenity and climate change.

Review of Natural Resource Values – Project Director - America Somoa Government. A review of the options for using economic natural resource values in policy decisions, planning, enforcement and public education in American Somoa

Penton Hook Landfill Re-Establishment, Lead Economist – The Environment Agency. Assessment of the environmental costs and benefits of the options for rehabilitating Penton Hook Land fill site.

Valuation and optimisation model for PR09. Project Director, a Water Company. Construction of a cost-benefit analysis tool to assess future maintenance and investment work for a water only company. Large regional stated preference surveys of domestic and commercial water customers undertaken to capture their willingness to pay for water service improvements and inform the optimisation model.

PR09 Water Resources Plan Options Appraisal Study. Project Director, a Water Company. Development and application of the Multi-Criteria Analysis (MCA) methodology for the appraisal of approximately 65 options for the water company’s Resources Plan with the aim of arriving at a preferred option in economic, environmental and social terms.

The Water Framework Directive Preliminary Cost Effectiveness Analysis (pCEA), Project Manager, The Environment Agency. Project managing the Agency’s pCEA project designed to co-ordinate and optimise the Agency’s input into the Defra/WAG’s national pCEA.

Hinkley A decommissioning end-state option appraisal, Project Director, Nuclear Decommissioning Authority (NDA).Development and application of a multi-criteria option appraisal framework for prioritisation of decommissioning end-state options for Hinkley A facility.

Waterline Economy, EU Interreg project, The Environment Agency. Design and delivery of a two day workshop for the seven countries of the North Sea region. The Workshop developed an approach for identifying and assessing the full range of benefits associated with the Waterline Economy projects.

April 2003-July 2006 **Principal Economist at the Environment Agency (EA)**

- A specialist on the EC Water Framework Directive (WFD)
- The Agency's lead on the UK Collaborative Research Programme (CRP) on Economics for the WFD, which developed the economic appraisal tools for the Water Framework Directive.
- Responsible for integrating the CRP products into Agency business
- Managed the economics team's work on agricultural issues
- Project managed a number of studies including: two studies designed to set out the business-as-usual baseline for Agriculture for the WFD; a study of non-use valuation, a study on groundwater valuation, and a study of cost-effective options for reducing TBT (a priority hazardous substance).
- Review of non market valuation approaches for water industry price review - PR04

Jan 1995- March 2003 **Independent Consultant**

2003

International Institute for Environment and Development, London. Reports prepared on markets for environmental services.

2002

ASEAN Regional Centre for Biodiversity Conservation (ARCBC) – Philippines. Lead facilitator at research conference on biodiversity valuation in Manila.

2001

Vietnam-Sweden Mountain Rural Development Project (MRDP) – Ministry of Agriculture and Rural Development. Assessment of the impacts of tree planting activities, carried out under the MRDP project, on local livelihoods in northern Vietnam.

2000

Management of Krau Wildlife Reserve, Capacity Building and Human Resource Development, Kuala Lumpur, Malaysia (DANCED). Preparation of a guide on the economic valuation of protected areas in Malaysia with special emphasis on Krau Wildlife Reserve. Delivery of training workshop on the economic valuation of protected areas and its relevance to management.

Lecturer, University of Sussex. Cost Benefit Analysis and the Environment, MA programme in Environment, Development and Policy

'The Valuation of Biological Diversity for National Biodiversity Strategies and Action Plans'. The United Nations Environment Program (UNEP). Delivery of a one week workshop in Fiji for the Pacific Island countries on the Valuation of Biological Diversity. A Guide for trainers in this area was also prepared.

1999

Development of A Sustainable Integrated Management Plan for the Mangroves of Johor, Malaysia'. Johor State Forestry Department / DARUDEC/DANCED. Responsible for economic valuation studies of the mangroves of Johor to inform the development of an integrated management plan for the area

1998

Lead Consultant, Turkey Forestry Sector Review. Management of the World Bank's Global Environmental Overlay Program (GOP) of Turkey's Forest Sector Review. Responsibilities included: development of methodology for mainstreaming biodiversity conservation and other global environmental objectives into the forestry sector policies and programmes; identification of additional resources/incentives required for local resource managers to conserve globally important biodiversity; development of TORs, budget and workplan for Government counterparts; and development of mechanisms for dissemination of findings.

EAPSEA/SEARCH/EDI-World Bank Regional Training Course in Environmental Economics, Los Banos, Philippines. Resource Person

1977

The Economy and Environment Programme for Southeast Asia (EEPSEA). Cambodia Program

Design and management of two eighteen month policy related research projects: 'An Economic Analysis of Tropical Forest Land Use Options in Ratanakiri Province, Cambodia'; and, 'An Economic Analysis of Alternative Mangrove Management Options in Koh Kong Province, Cambodia'. A parallel objective of the program was to train a team of Cambodian researchers from relevant Government ministries in the economic analysis of natural resources through regular training workshops and research assignments.

Vietnam Research Network in Environmental Economics.EEPSEA/EEU (Environmental Economics Unit, National University of Vietnam).Supervisor for two projects: 'An Economic Analysis of Can Gio Mangrove Management Scheme, Hochiminh City, Vietnam', and, 'A Comparative Economic Analysis of Farming Systems in Brackish Water Areas of the Mekong Delta'.

Cambodia Environmental Management Project, USAID. Advice and training to the Department of Policy and Planning of the Ministry of Environment, Cambodia.

1996

Lithuania, Biodiversity and Landscape Conservation. European Union, PHARE. Development of Business Plan and methodology for the economic analysis of Varniai Regional Park, Lithuania, as a model for other protected areas within the country.

National Institute for Scientific & Technological Policy and Strategic Studies (NISTPASS) Vietnam & the University of Toronto, Canada Training Project in Environmental Management (Vietpro-2020). Responsible for designing and delivering a workshop on the Economic Valuation of Natural Resources, Hanoi, Vietnam

EEPSEA/UAF (University of Agriculture and Forestry, Hochiminh City, Vietnam).'The Economic Valuation of the Environment and Environmental Cost Benefit Analysis', Training Course in Environmental Economics. Lecturer.

Natural Resources Valuation Manuals.Preparation of two manuals to be used by researchers in Southeast Asia on: 'The Economic Valuation of Tropical Forest Land Use Options'; and, 'The Economic Valuation of Mangroves'. Funded by EEPSEA

1995

Research/Training Project in Environmental Economics. Ministry of Environment, Cambodia/EEPSEA.Design and management of environmental economics research/training project on the costs and benefits of fuel efficient stoves in Prey Veng Province, Cambodia. Basic course in environmental economics held at Ministry of Environment.

Wetlands Action Plan, Cambodia.Wetlands International (Malaysia).Technical review and editing of 'Wetland Action Plan for the Royal Government of Cambodia'.

Ecotourism Action Plan Malaysia.World Wide Fund (WWF), Malaysia.An economic analysis of ecotourism in Malaysia as part of an Ecotourism Action Plan being prepared by the WWF for the Malaysian Government. The reports prepared discuss ways in which ecotourism in Malaysia might best be managed in order to maximise ecological, economic and local community benefits. Case studies of three ecotourism sites in Malaysia are used to highlight key management issues.

Wholesale Market Project, Bucharest, The Republic of Romania The European Bank for Reconstruction and Development (EBRD). Environmental impact analysis of retail markets in Bucharest.

June 1993- Dec 1994

The Cambodia Environmental Advisory Team (CEAT).

Resource Economist. United Nations Development Program, Office for Project Services, (UNDP/OPS). Phnom Penh, Cambodia.

Responsibilities and Activities:

- (i) Provision of technical advice to the Government, and in particular the Ministry of Environment (MOE), in the areas of resource management and conservation. Advice provided on: the organisational structure of the MOE; environmental impacts of investment proposals; financing mechanisms for environmental and natural resource management activities in

Cambodia; and, the economic benefits of environmental and natural resource management and techniques for valuation of these benefits.

- (ii) Management of CEAT's 'Small Scale Initiatives Program'. Under this program twelve community level, environmentally sensitive projects were funded.
- (iii) Chief author and editor of Cambodia's First State of the Environment Report, 1994.
- (iv) Report prepared on a sustainable development strategy for the remote and underdeveloped areas of Cambodia. The report highlights the development priorities, main environmental issues and areas of economic potential for three provinces in Cambodia. Economic and fiscal mechanisms for attracting investors to these areas are also discussed.
- (v) Training. Lectures given on a range of environmental topics at CEAT's three training courses organised for the staff of the Ministry of Environment. Training course in 'Economics, Energy and the Environment' run for the staff at the Ministry of Industry Energy and Mines.
- (vi) Preparation of speeches and papers to be presented by the Minister of Environment.
- (vii) Assistance in the preparation of a draft timber concession contract for Cambodia.
- (viii) Organisation of First National Workshop on Environment and Development, December 1993.

1992-1993 Research Associate, Centre for Social and Economic Research on the Global Environment, (CSERGE), University College London.

Research on: (i) The environmental challenges to international oil companies with particular emphasis on the global environmental concerns of climate change, deforestation and biodiversity loss. Paper prepared in collaboration with Fridtjof Nansens Institute, Norway; (ii) The role of international carbon offsets by private companies as a mechanism for controlling greenhouse gas emissions; (iii) The position of renewable energy technologies and energy conservation in the United Kingdom within a 'sustainable' energy policy.

1992 Environmental Economic Consultant, London Environmental Economic Centre (LEEC) / International Institute for Environment and Development (IIED)

Research on: (i) The economic linkages between the international trade in tropical timber and the sustainable management of tropical forests and the economic effects of the trade and policy options available to improve forest management. Report prepared for the International Timber Trade Association, (ITTO); (ii) The economic value of species and biochemical prospecting information provided by the Costa Rican National Biodiversity Institute; (iii) The development of a methodology to assess the social costs and benefits and distributional consequences of alternative tropical forest land use options. Report prepared for the U.K. Overseas Development Administration.(6 month seconded from CSERGE)

1991-1992 Research Associate, Centre for Social and Economic Research on the Global Environment (CSERGE)

Report prepared for the UK Department of Trade and Industry on the social costs of fuel cycles in the UK. Following a comprehensive literature review of the monetary assessments of the external costs of energy use, the report prepared derives preliminary estimates of the social cost 'adders', in terms of pence per kWh, for each of twelve U.K. fuel technologies under review.

1990 Swastic Surfactants Ltd. Bombay, India. Environmental Consultant

Report prepared detailing the steps that chemical companies might take to try to alleviate environmental problems in India. .

1990 The Centre for Accountability and Debt Relief, Research Assistant

Research on the debt crisis in developing countries, and on the development of a global debt write-off program for sustainable development.

1988-1990 Arthur Andersen & Co., London

Chartered accountants. Trainee chartered accountant in Financial Markets Audit Group.

Education

2003: PhD, Economics, University College London

1991: MSc Environmental Economics and Resource Management, University College London

1988: BA (Hons) 2.1 Economics and Philosophy, University College London

Selected Reports and Papers

Bann, C and Wood, S. 2011. Valuing groundwater – A Practical Approach for Integrating Groundwater Economics Values into Decision Making in the Southern African Development Community (SADC). Paper presented at International Conference on Groundwater: Our Source of Security in an Uncertain Future, Pretoria September 2011.

Bann, C. 2010. 'Agriculture – Sectoral Analysis and Findings' in Bovarnick, A., F. Alpizar, C. Schnell, Editors. *The Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin America and the Caribbean: An economic valuation of ecosystems*, United Nations Development Programme, 2010.

Jacobs, 2009 (contributing author/project director). 'The Benefits of Inland Waterways'. Report to the Department of Environment Food and Rural Affairs, UK.

Jacobs, 2008 (contributing author/project director). 'Valuing England's Terrestrial Ecosystem Services', Report to the Department of Environment Food and Rural Affairs, UK.

Jacobs, 2008 (contributing author/project director). 'Cost Benefits Analysis for PR09: Valuation and Optimisation Model'. Report to South East Water.

Jacobs, 2007 (contributing author/project director).contributing author). 'Environmental Accounts for Agriculture.' Report to Defra, Welsh Assembly Government, Scottish Executive and Department for Agriculture and Rural development (N.Ireland)

Bann, C., Fisher, J., and Horton, B., 2003. 'The Benefits Assessments Guidance for PRO4: Review of Non-use Values for Water Quality and Water Resources and Values for Bathing Water Improvements'. Environment Agency.

Bann, C. 2003. 'The Economic Valuation and Market Capture of Forest Functions in Developing Countries'. PhD Thesis, University College, London

Bann, C. 2003. 'Sustainable Financing of Natural Resource Management – Markets for Environmental Services'. Report to IIED, London

Bann, C. 2003. 'Sustainable Financing of Natural Resource Management – Private Sector Community Partnership'. Report to IIED, London

Bann, C. 2002. 'The Economic Arguments for Biodiversity Conservation' paper presented at the ASEAN Regional Centre for Biodiversity Conservation Third Research Conference. Biodiversity Valuation: Approaches and Case Studies. 17-19 June 2002, Sulo Hotel, Quezon City, Philippines.

Bann, C. 2002. 'Biodiversity Valuation – An Overview of Valuation Techniques: Advantages and Limitations' paper presented at the ASEAN Regional Centre for Biodiversity Conservation Third Research Conference. Biodiversity Valuation: Approaches and Case Studies. 17-19 June 2002, Sulo Hotel, Quezon City, Philippines.

Bann, C. 2002. 'The Economic Value of Tropical Forests'. Paper presented at Tropenbos International Seminar 2002 – Forest Valuation and Innovative Financing Mechanisms. March, 2002. The Hague.

Bann, C. 2001. 'Assessing the Impacts of Tree Planting on Local Livelihoods in Northern Vietnam - A Discussion of Methodology and Preliminary Findings'. Prepared for the Vietnam-Sweden Mountain Rural Development project, Ministry of Agriculture and Rural Development.

Bann, C. 2000. 'The Economic Valuation of Protected Areas in Malaysia: Methodology and Implications for Management, with a Case Study Example of Krau Wildlife Reserve, Pahang, Malaysia'. Management of Krau Wildlife Reserve, Capacity Building and Human Resource Development. Department of Wildlife and National Parks Malaysia/DANCED.

- Moran, D. and C. Bann. 2000. 'The Valuation of Biological Diversity for National Biodiversity Strategies and Action Plans: A Guide for Trainers'. The United Nations Environment Program.
- Bann, C. 1999. 'An Economic Assessment of the Mangroves of Johor State, Malaysia'. Johor State Forestry Department/DANCED: Preparation of an Integrated Management Plan for the Sustainable Use of the Mangroves of Johor.
- Bann, C. 1999. 'A Contingent Valuation of the Mangroves of Benut, Johor State, Malaysia'. Johor State Forestry Department/DANCED: Preparation of an Integrated Management Plan for the Sustainable Use of the Mangroves of Johor.
- Bann, C. 1998. 'Turkey: Forest Sector Review – Global Environmental Overlays Program'. Report to World Bank, July, 1988.
- Bann, C. 1998. 'An Economic Analysis of Tropical Forest Land Use Options: A Manual for Researchers'. The Economy and Environment Program for Southeast Asia (EEPSEA), April 1998.
- Bann, C. 1998. 'The Economic Valuation of Mangroves. A Manual for Researchers'. The Economy and Environment Program for Southeast Asia (EEPSEA). April, 1998.
- Bann, C. 1997. 'An Economic Analysis of Alternative Mangrove Management Strategies in Koh Kong Province, Cambodia'. The Economy and Environment Program for Southeast Asia (EEPSEA), Research Report Series November 1997.
- Bann, C. 1997. 'An Economic Analysis of Tropical Forest Land Use Options Ratanakiri Province, Cambodia'. The Economy and Environment Program for Southeast Asia (EEPSEA), Research Report Series, November 1997.
- Bann, C. 1996. 'An Economic Analysis of Non-Timber Forest Products in Ratanakiri Province, Cambodia: A Discussion of the Research Approach and Preliminary Results'. Prepared for the Economy and Environment Program for Southeast Asia (EEPSEA) Biannual Workshop, 21-13 May, 1996.
- Bann, C. 1996. 'Maximising the Economic and Ecological Benefits of Ecotourism in Malaysia: A Case Study of Kampung Kuantan Fireflies', WWF Malaysia, Project Report, March 1996.
- Bann, C. 1996. 'Maximising the Economic and Ecological Benefits of Ecotourism in Malaysia: A Case Study of Kinabatangan River, Sabah', WWF Malaysia, Project Report, March 1996.
- WWF, 1996 (contributing author). 'Malaysian National Ecotourism Plan'.
- Bann, C. 1995. 'An Economic Analysis of Fuel Efficient Stoves in Prey Veng Province, Cambodia', Ministry of Environment, Royal Government of Cambodia, Economy and Environment Program for South East Asia, December 1995.
- Bann, C. 1995. 'Economic Analysis Report. Bucharest Wholesale Market Project. Municipality Component'. Report to the European Bank for Reconstruction and Development (EBRD). March 1995.
- Bann, C. (Chief author and editor) 1994. 'Cambodia: First State of Environment Report: 1994'. Ministry of Environment. Royal Government of Cambodia.
- Woodsworth, G. and C. Bann, 1994. 'The Status of the Kingdom of Cambodia's Environment: Emerging Policies and Strategies'. Paper presented by H.E. Dr. Mok Mareth, Minister of Environment, at the Fourth Pacific Environmental Conference: Strategic Alliances for Environmental Governance in the Pacific Century, East-West Center, Honolulu, Hawaii, 27-29 March 1994.
- Bann, C. 1994. 'Towards a Sustainable Development Strategy for the Remote and the More Underdeveloped Regions of Cambodia'. The Cambodia Environmental Advisory Team, UNDP.
- H.E. Mok Mareth, D. Vanderstighelen, C. Bann, et al., 1994. 'UNTAC, CEAT Other International Actions and the Restoration of Cambodia's Forestry Policy'. Paper presented at The 5th Global Warming International Conference, April 4-7 1994, San Francisco.
- IIED, 1994 (contributing author). 'Economic Evaluation of Tropical Forest Land Use Options. A Review of Methodology and Applications'. Report to UK Overseas Development Administration.
- Bann, C. 1993. 'The Private Sector and Global Warming Mitigation', Center for Social and Economic Research on the Global Environment (CSERGE) *mimeo*

Pearce, D.W. and C. Bann, 1993. 'North-South Transfers and the Capture of Global Environmental Value', Paper for Oregon State University, Corvallis, Oregon.

Bergesen, H., C. Bann and D. Pearce, 1992. 'Environmental Challenges to International Oil Companies', Fridtjof Nansens Institute, Norway, 1992.

D.W. Pearce and C.A. Bann, 1992. 'The Social Costs of Fuel Cycles', Report to the U.K. Department of Trade and Industry, London: HMSO, 1992.

Pearce, D.W. and C.A. Bann, 1992. 'Environmental and Non-Environmental Externalities in the UK Fuel Cycle', Paper for OECD/IEA Conference on Life Cycle Analysis. Paris, May 1992.

Barbier, E., J. Burgess, J. Bishop, B. Aylward and C. Bann 1992. 'The Economic Linkages Between the International Trade in Tropical Timber and the Sustainable Management of Tropical Forests'. London Environmental Economics