



Recent PERSGA Activities Addressing Conservation of Biodiversity in the Red Sea & Gulf of Aden

**Ahmed KHALIL &
ZAHIR ALAGWAN
PERSGA**

11th Global RSAP Meeting
5-7 October 2009, Bangkok



PERSGA (The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden):

An intergovernmental Organization Dedicated to the Conservation of the Coastal and Marine Environment in the Region

Member States: Djibouti, Egypt, Jordan, Saudi Arabia, Somalia, Sudan, Yemen.



The Red Sea peculiarities

The Red Sea has distinct geology oceanography

Recent formation (around 27 million years)

The Red Sea is the warmest among the world's seas





The Red Sea Biodiversity

The Red Sea is one of the most important repositories of marine biodiversity.

More than 265 coral species; 6 % are endemic.

High degree of endemism (>30%)

Outsized proportion of the coastal habitats are in pristine state

Relatively low pollution



1350 fish species; 17 % endemic.

3 Turtle species, all are endangered

Marine mammals: small populations of Dugong; 15 cetacean species.

The PERGA Region holds several sites of regional and global conservation significance

Coral reefs in Sinai

Coral reefs in
Central Red Sea

Wajh Bank

Dugonab Bay

Sengaebe Atoll

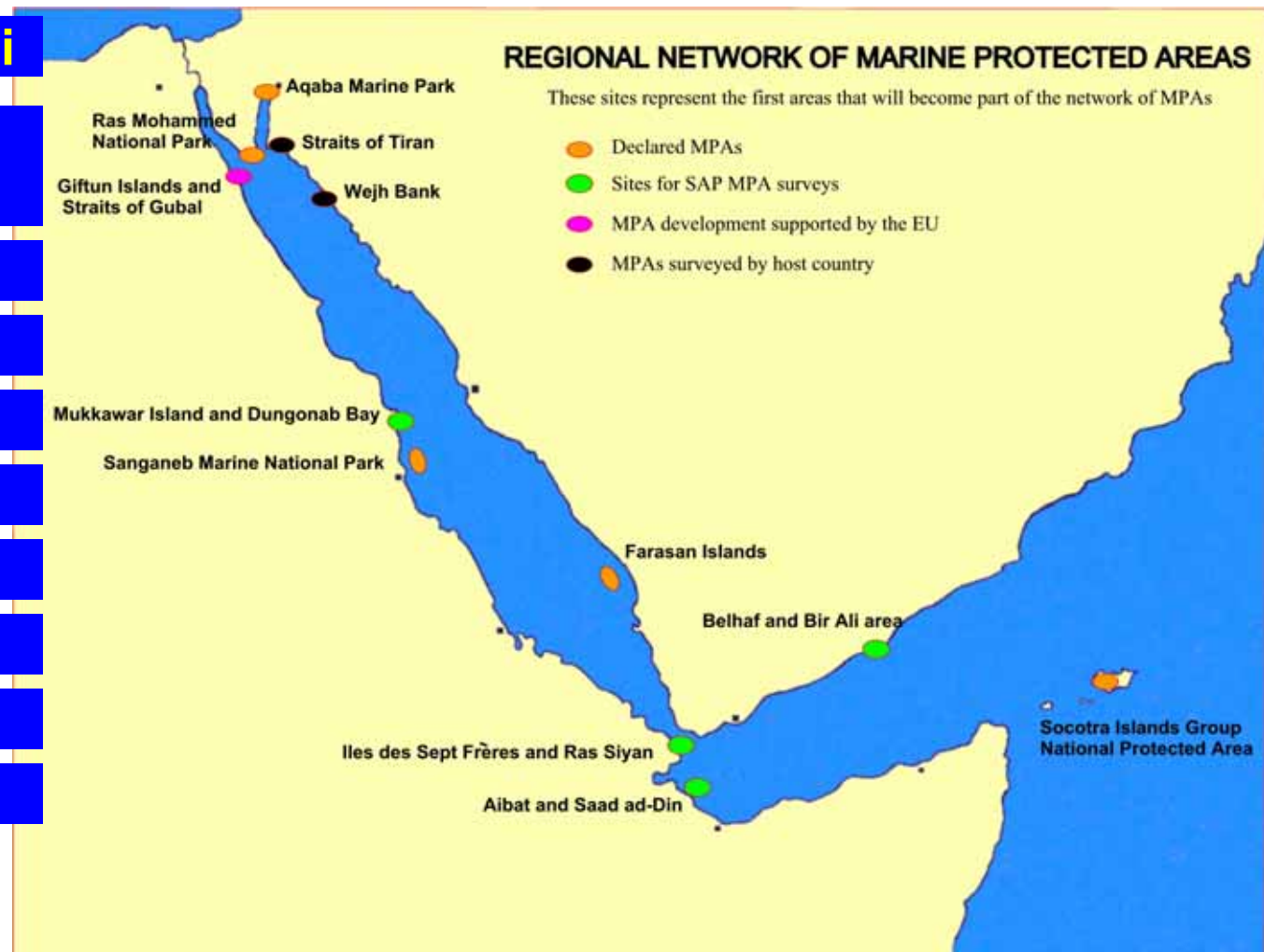
Farasan Islands

Sept Freres

Belhaf /Bir Ali

Aibat/ Saad-Adin

Socotra Islands



PERSGA Programs/Activities

□ Capacity Building

□ LMR Program

□ Biodiversity-MPAs Program

□ ICZM Program

□ Regional Monitoring Program

□ LBA Program

□ EMARSGA

□ On the-ground Activities



Protocol Concerning the Conservation of Biological Diversity and the Establishment of MPAs (2005)

Protocol for Protection of Marine Environment from Pollution from Land Based Activities (2005)

Egypt



Yemen



Saudi Arabia



Jordan



Djibouti



Sudan



2009: A New Protocol on Movement of Personnel & Equipment Across Borders in Case of Emergency in Jeddah



Egypt



Jordan



Sudan



Saudi Arabia



Djibouti



Baseline Work Addressing Biodiversity

Developing Standard Survey Methods for Key Habitats and Species and Training of Capacities

- Coral reefs and coral communities
- Mangroves and Intertidal Biotopes
- Seagrass beds
- Breeding Seabirds
- Marine Turtles
- Marine Mammals



Conduct assessment surveys

Developing:
Status reports
Regional Action Plans
National Action Plans



Enhancement of the Training Program

Wider coverage of priority issues of national, regional and global concerns

Building partnerships through organizing joint training with other organizations

Participation of trainees from other regions to exchange experience and enforce partnership

Wider stakeholder participation in the training

Venues in different member states to enhance countries involvement and ownerships

Year	2006	2007	2008
Training events	3	4	8
Participants	66	90	158

Regional Training Workshops 2009

#	Title of training	Duration	Deadline for Application	Location	Partner
1.	Guidelines for Economic Valuation of Coastal and Marine Habitats in the Red Sea and Gulf of Aden	March 23-25	Feb 18	PERSGA HQ Jeddah-KSA	UNEP- ROWA
2.	Mangrove Rehabilitation and Management Techniques	May 11-14	April 15	PERSGA HQ Jeddah-KSA	ISESCO
3.	Environmental Education	June 7-9	May 20	PERSGA HQ Jeddah-KSA	GCC
4.	Ecosystem Approach to Fisheries Management	Oct. 12-14	Sep 09	PERSGA HQ Jeddah-KSA	ISESCO
5.	Quality Assurance and Control in Seawater Monitoring	Nov 15 -17	Oct 14	Jordan	
6.	Modeling and Control of Chemical Spills	Dec 19-21	Nov 20	PERSGA HQ Jeddah-KSA	
7.	Assessment of Coastal Vulnerability to CC Impacts II: DIVA and CVI applications	25-27 Jan 10	Dec 15	PERSGA HQ Jeddah-KSA	

#	Title of training	Duration	Deadline for Application	Location	Partner
8.	Oil Spill Sensitivity Mapping	April 27-29	March 10	PERSGA/MEMAC Hurgada-Egypt	IMO
9.	'On-Scene Commanders' at oil spills, National Contingency Plans and Oil spill preparedness and response	June 20-23	April 31	PERSGA/MEMAC Hurgada-Egypt	
10.	Status of Contingency Planning in the PERSGA Region	June 24-25	April 31	PERSGA/MEMAC Hurgada-Egypt	
11.	Requirements of Special Areas Under MARPOL Convention	Nov 2-4	October 1	PERSGA/MEMAC Hurgada-Egypt	IMO

Training Workshop on Compensation of Coral Reef Damage by Ship/Boat Groundings (Jeddah, August 2008)



Collaboration with IUCN

Training Workshop on Oil Spill Sensitivity Mapping (Hurghada, May 2009)



Building and promotion of regional capabilities in designing, preparing and usage of sensitivity maps



**In Collaboration with
the IMO**

Executing the Regular Regional Habitat Surveying Program for 2008-2009





الهيئة الإقليمية للمحافظة على
بيئة البحر الأحمر وخليج عدن

الاجتماع الإقليمي حول الوضع الراهن لأسماك القرش في البحر الأحمر وخليج عدن The Regional Meeting on the status of Sharks in the Red Sea and Gulf of Aden

Jeddah : 12 August, 2009

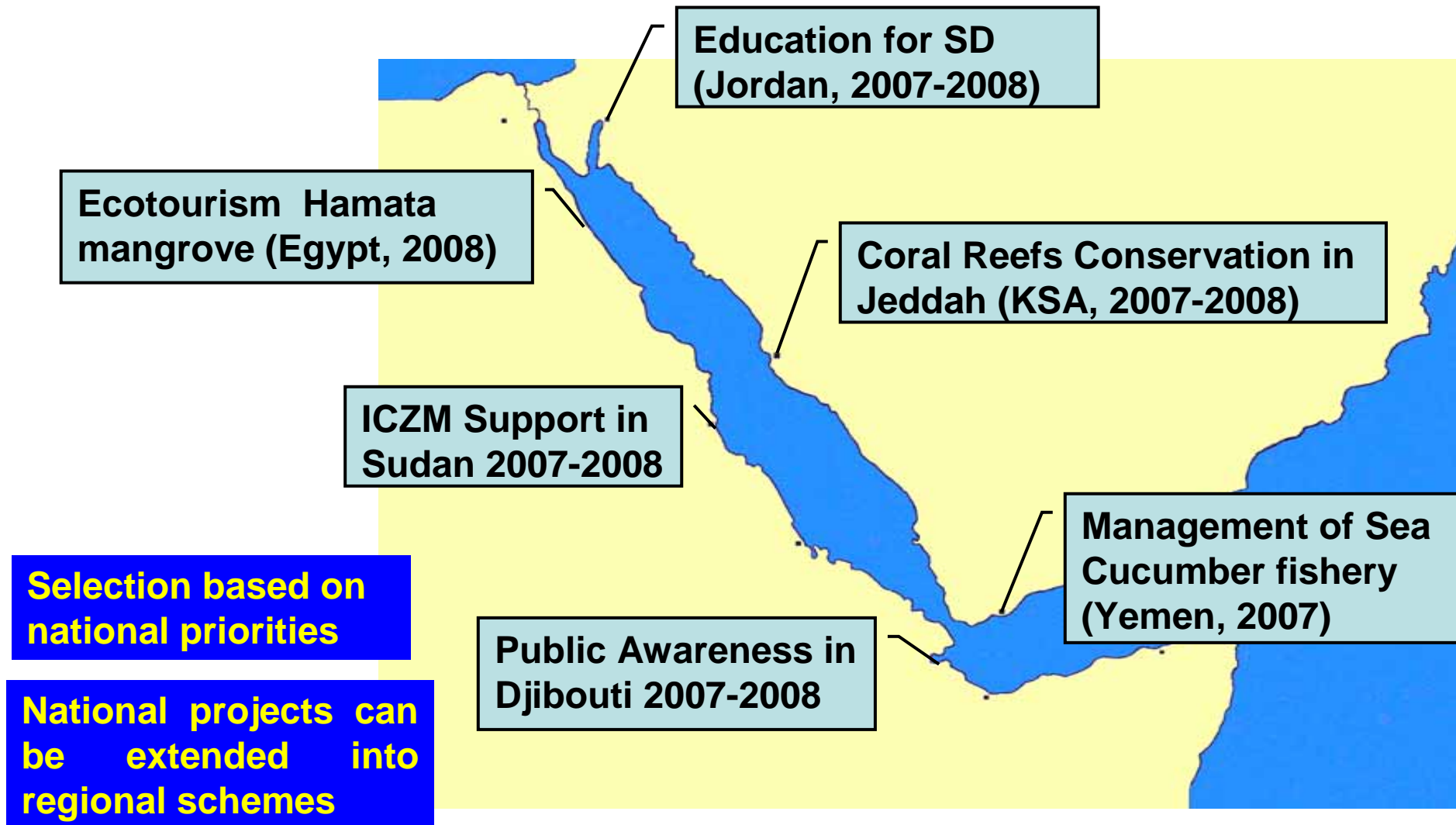
Regional coordination for:

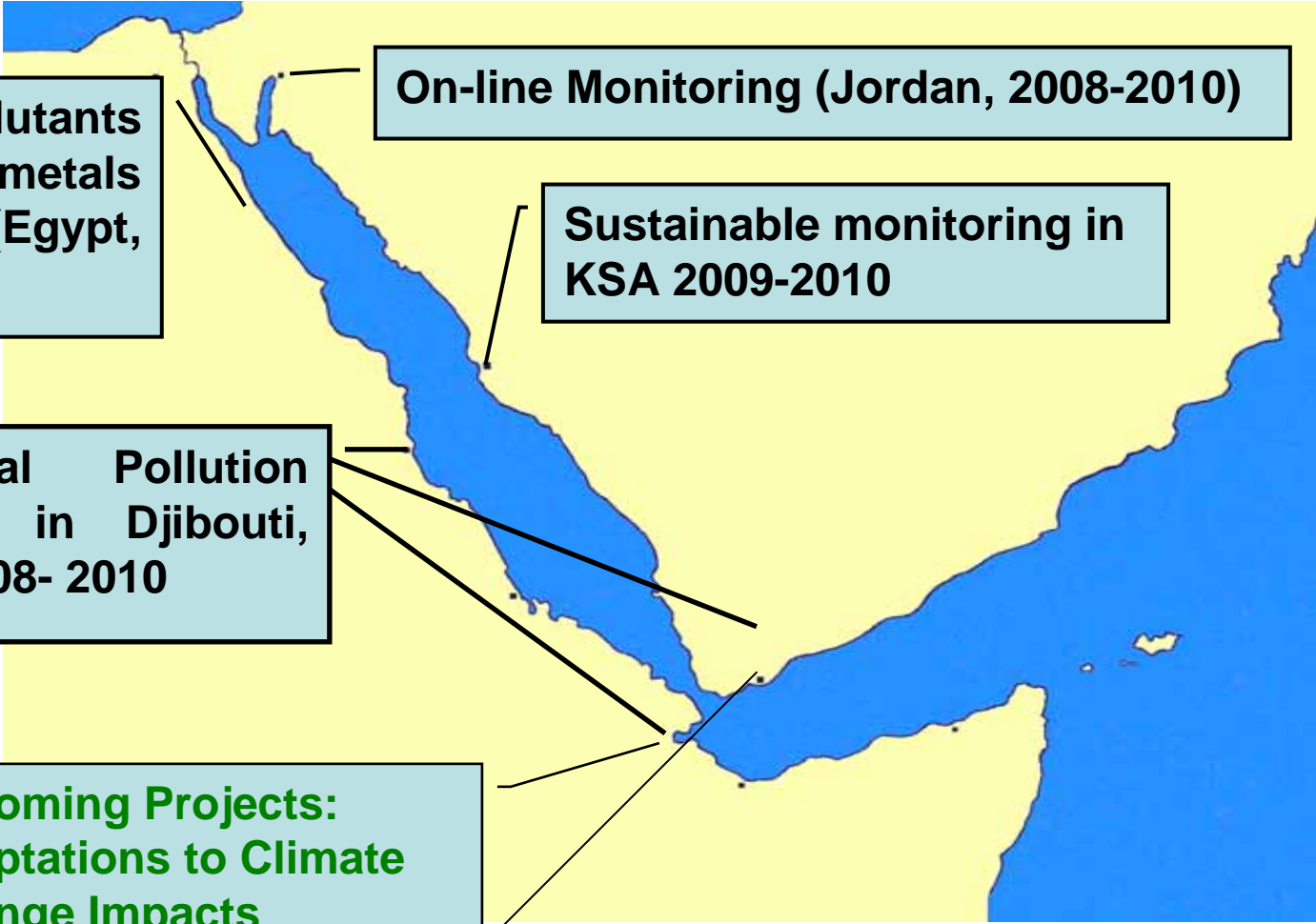
Undertaking periodic assessments of the status of sharks in the Red Sea and Gulf of Aden

Cooperation in technical, legislative and management aspects; exchange of information and experience



PERSGA On-ground Activities: Closer involvement for mainstreaming Regional Plans into National Policies





**Organic pollutants
and heavy metals
Monitoring (Egypt,
2008-2009)**

On-line Monitoring (Jordan, 2008-2010)

**Sustainable monitoring in
KSA 2009-2010**

**Supporting National Pollution
Response Systems in Djibouti,
Sudan and Yemen 2008- 2010**

**Upcoming Projects:
Adaptations to Climate
Change Impacts**



**Installing Mooring Buoys at diving sites:
Jeddah- KSA (2007)
Aqaba- Jordan (2009)**



- 66 mooring buoys installed
- Coastal areas delineation for arranging recreational activities
- Public awareness materials activities

Promotion of National Oil Spill Response System in Sudan



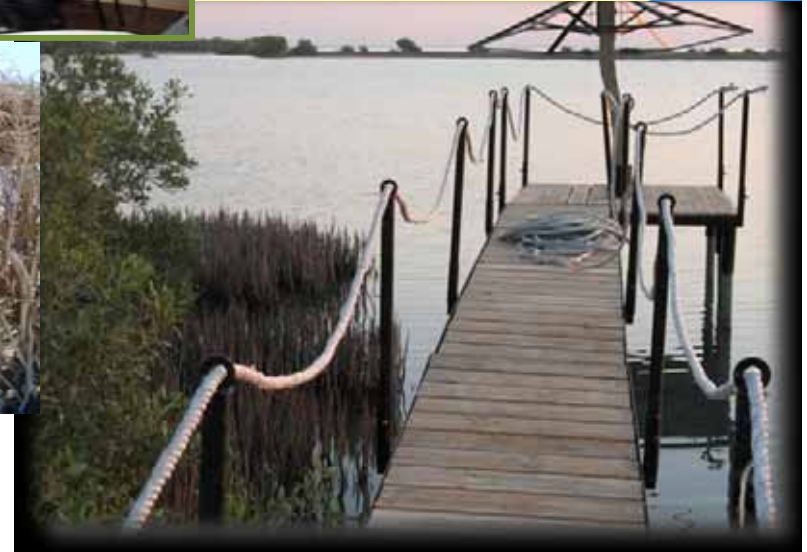
Establishment of a national Oil Spill Response coordinating center

Capacity building and awareness workshops

Decision makers workshop (Khartoum 2009)



Mangrove based ecotourism project - Egypt



Training local villagers

Equipment and infrastructure support

Awareness materials

Involving several stakeholders and civil society: schools, the university, NGOs, religious educators, journalists

Environmental Awareness in coastal areas in Djibouti

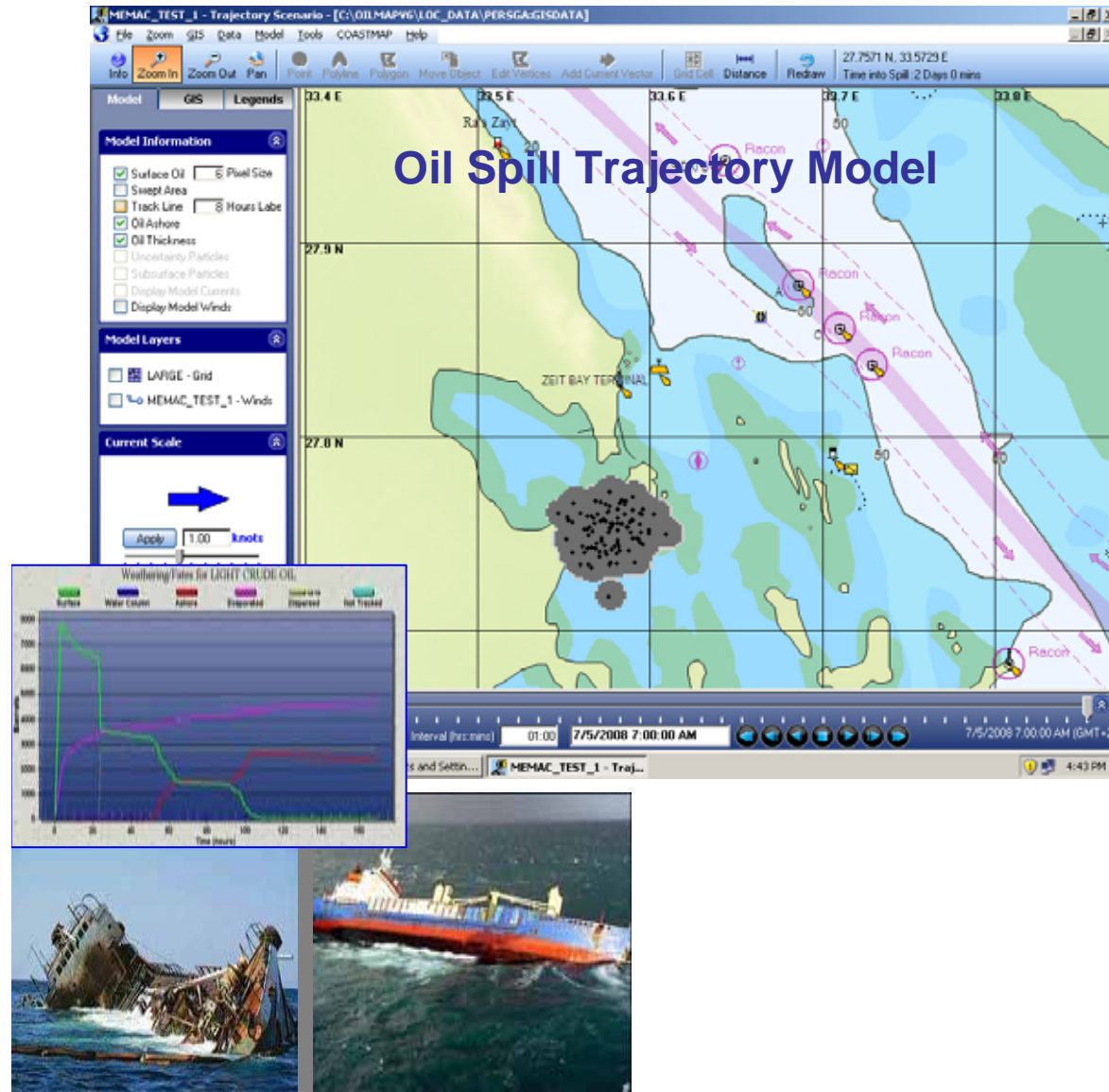


« Quant à la terre, Nous

L'environnement, un bien commun



Installing Oil Spill Trajectory Model at EMARSGA (2008-2009)



Major Training events organized at EMARSGA:

- Oil spill modeling
- Sensitivity mapping
- Contingency planning
- Marine invasive species



PERSGA/UNIDO Collaboration: Building Regional Capacities to implement Stockholm Convention on POPs



**The Stockholm
Convention**



UNIDO



PERSGA



GEF

Promotion of strategies to reduce unintentional production of POPs in the Red Sea and Gulf of Aden (PERSGA) coastal zone

Impacts of CC on RSGA biodiversity

- ❑ **Assessing and mapping vulnerability of the coastal zones in the region to CC impacts:**
 - A. Slow-onset hazards such as inundation, erosion and shoreline retreats from sea-level rise.
 - B. Rapid-onset hazards such as storms and floods.
- ❑ **Assessing socio-economic impacts:** Magnitude of physical damage and recovery costs, impacts economic, Health etc.
- ❑ **Promotion of appropriate human and institutional capacities**
- ❑ **Community awareness program:**
Target decision makers, various stakeholders and civil society
- ❑ **Assessing vulnerability and adaptive mechanisms of habitats and species to CC impacts**
- ❑ **Strengthening the regional climate change observation system**

➤ **Regional Training Workshop on coastal vulnerability: 8-10 November 2008**

➤ An upcoming workshop on application of DIVA and CVI in the Red Sea and Gulf of Aden will be held in January 2010

➤ Vulnerability assessments of coastal zone and marine biota in the countries will be accomplished through on-ground projects

➤ CC observation data at PERSGA data center

➤ Regional guidelines for adaptation measures

Recent PERSGA publications addressing biodiversity conservation



Regional Guidelines and Manuals for:

- Standard Key Habitats/ Species Survey Methods (in Arabic)
- Compensations Following Damage to Coral Reefs in the Red Sea and Gulf of Aden
- Economic Valuation of Coastal and Marine Ecosystems in the Red Sea and Gulf of Aden
- Mangrove Restoration in the Red Sea and Gulf of Aden
- Education for Sustainability (in Arabic)

Constraints / Challenges

- MEAs- PERSGA- Member States works not adequately complementary and synergized
- The growing maritime activities through the Red Sea, particularly transport oil and petrochemicals
- Fast development in the coastal areas in the Region (tourism, industry etc.)
- Limited capacities and funds



Thank You...