



# SGA Network 4<sup>th</sup> Annual Meeting

25-28 November, 2012

Stellenbosch, South Africa

Arab Millennium Ecosystem Assessment

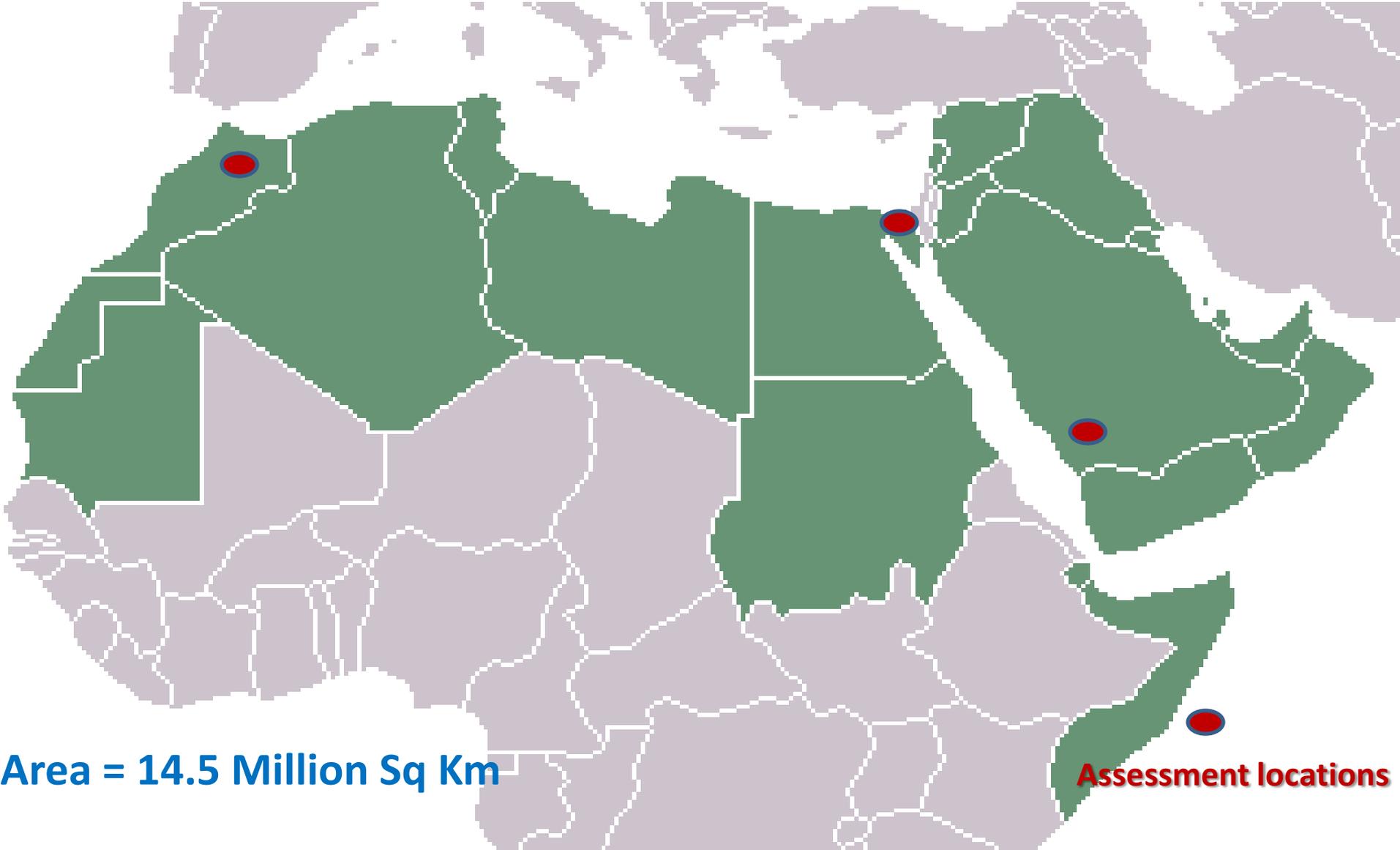
Synthesis, Lessons, and Way Forward



# Outline

- **Overview**
- **Socio Economics**
- **Common issues**
- **Ecosystem Services**
- **Policy Responses**
- **Lesson learned**
- **Ongoing efforts and the way forward**

# Arab Region

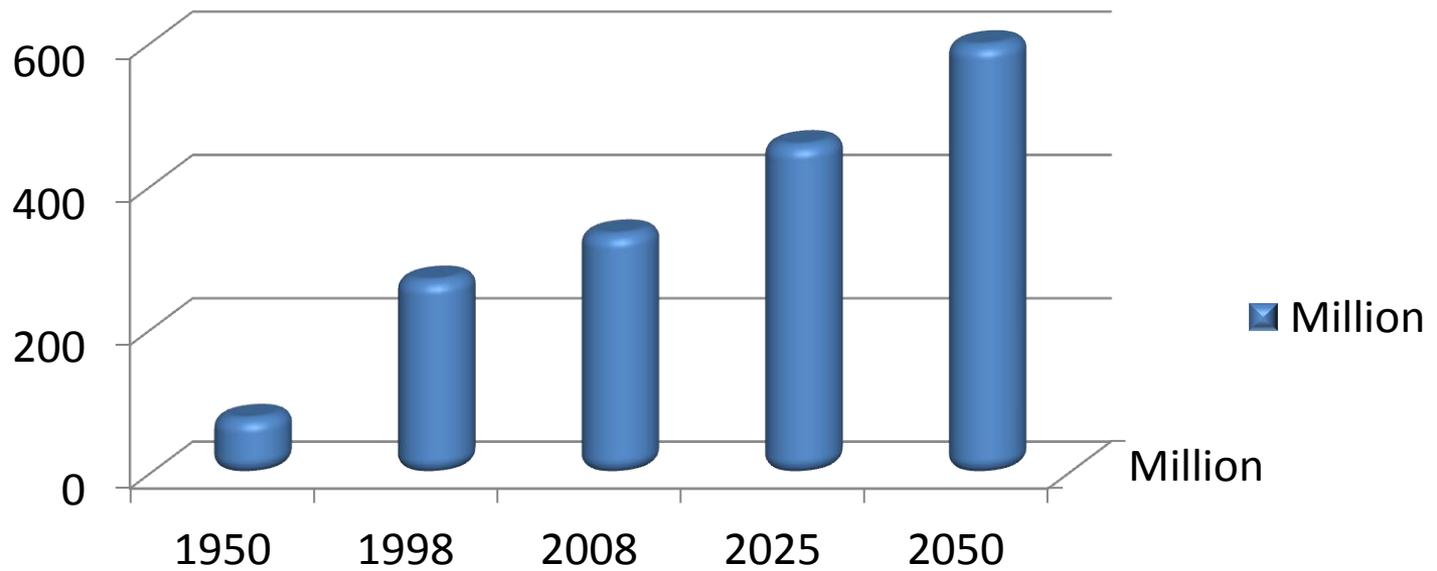


Area = 14.5 Million Sq Km

Assessment locations

# Population Growth

Million



# Population

1950

77 m

1998

270 m

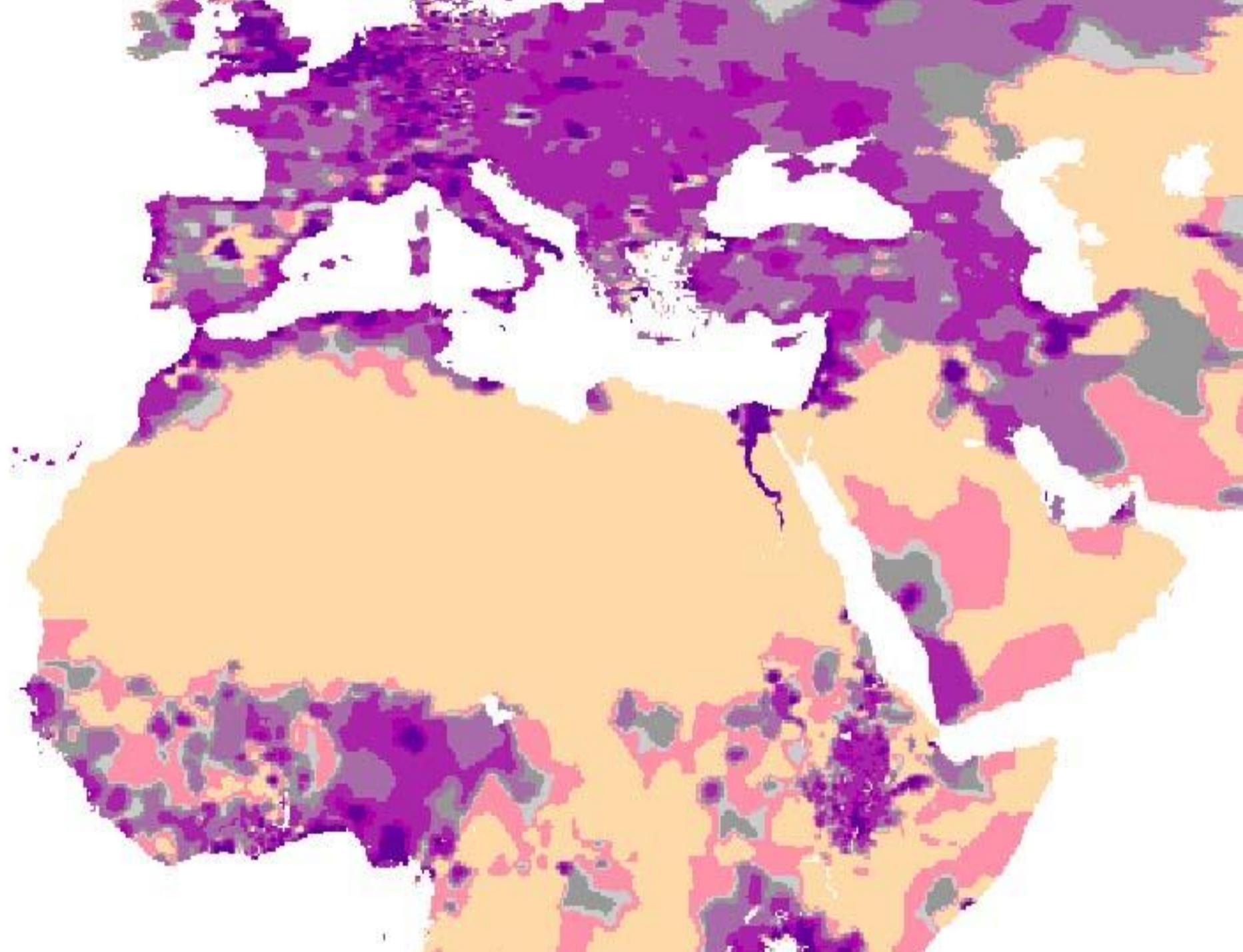
2007

335 m

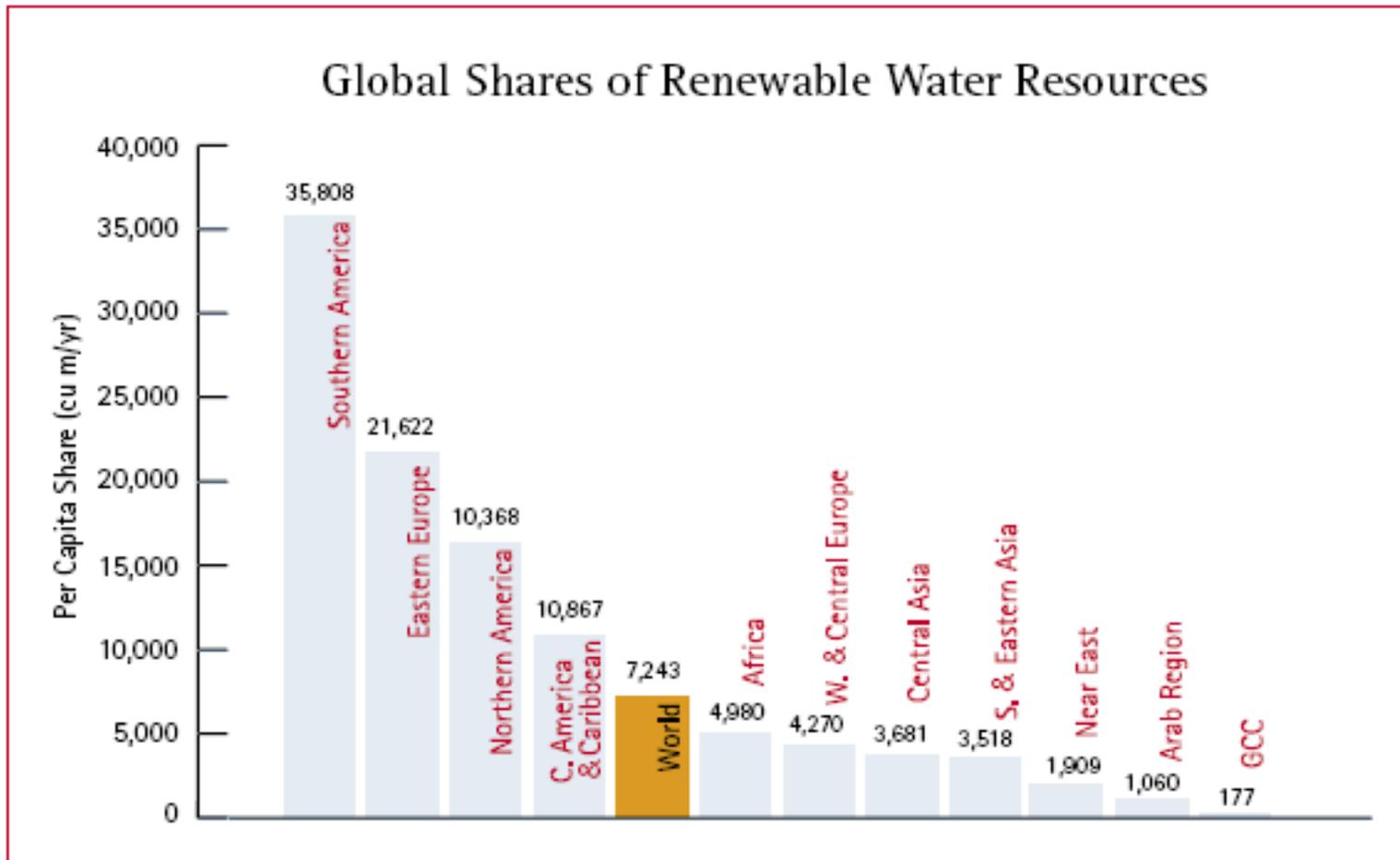
2050

598.5 m

Current population growth rate = 2.1

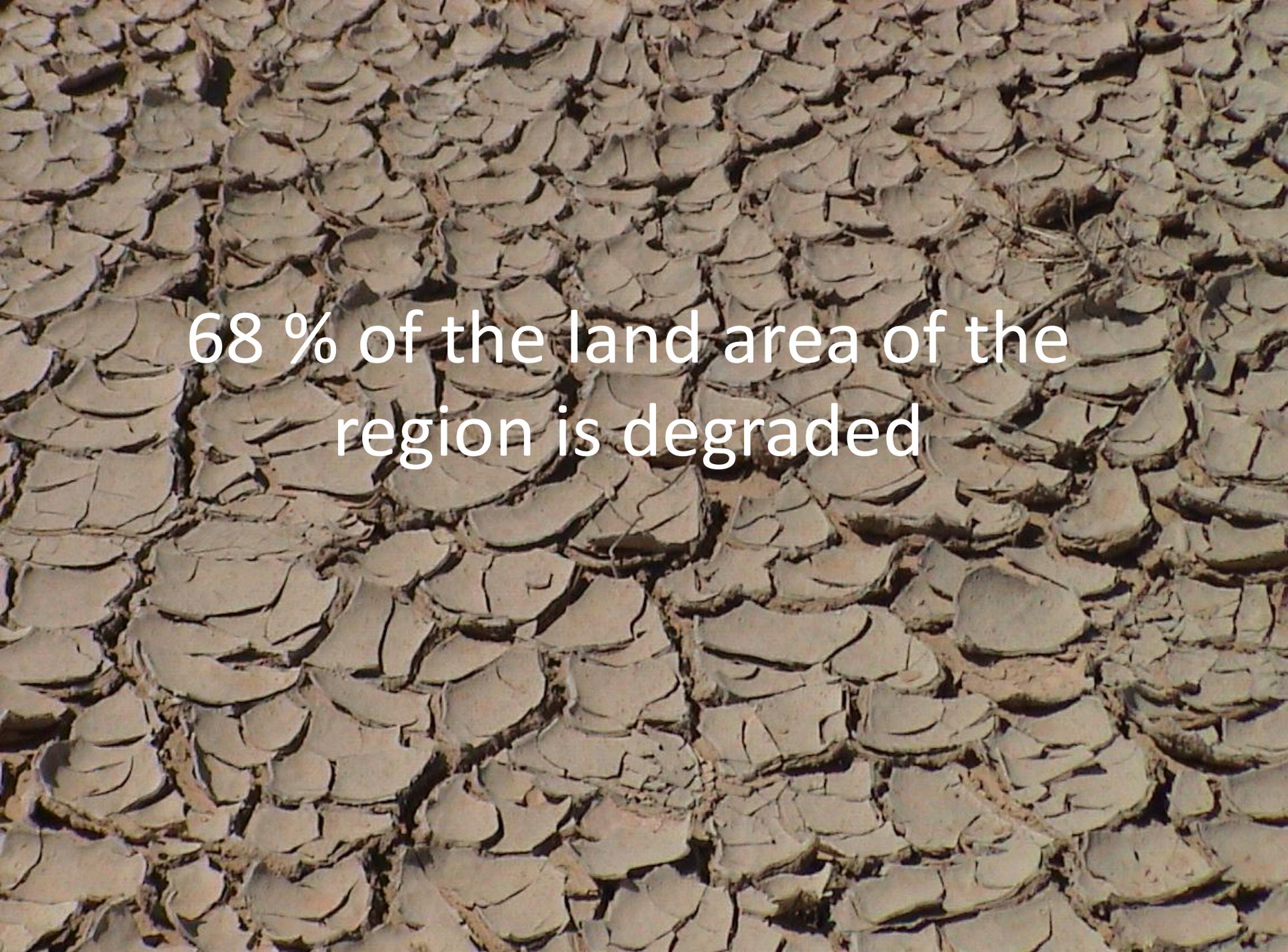


# Global Per Capita Water Share •



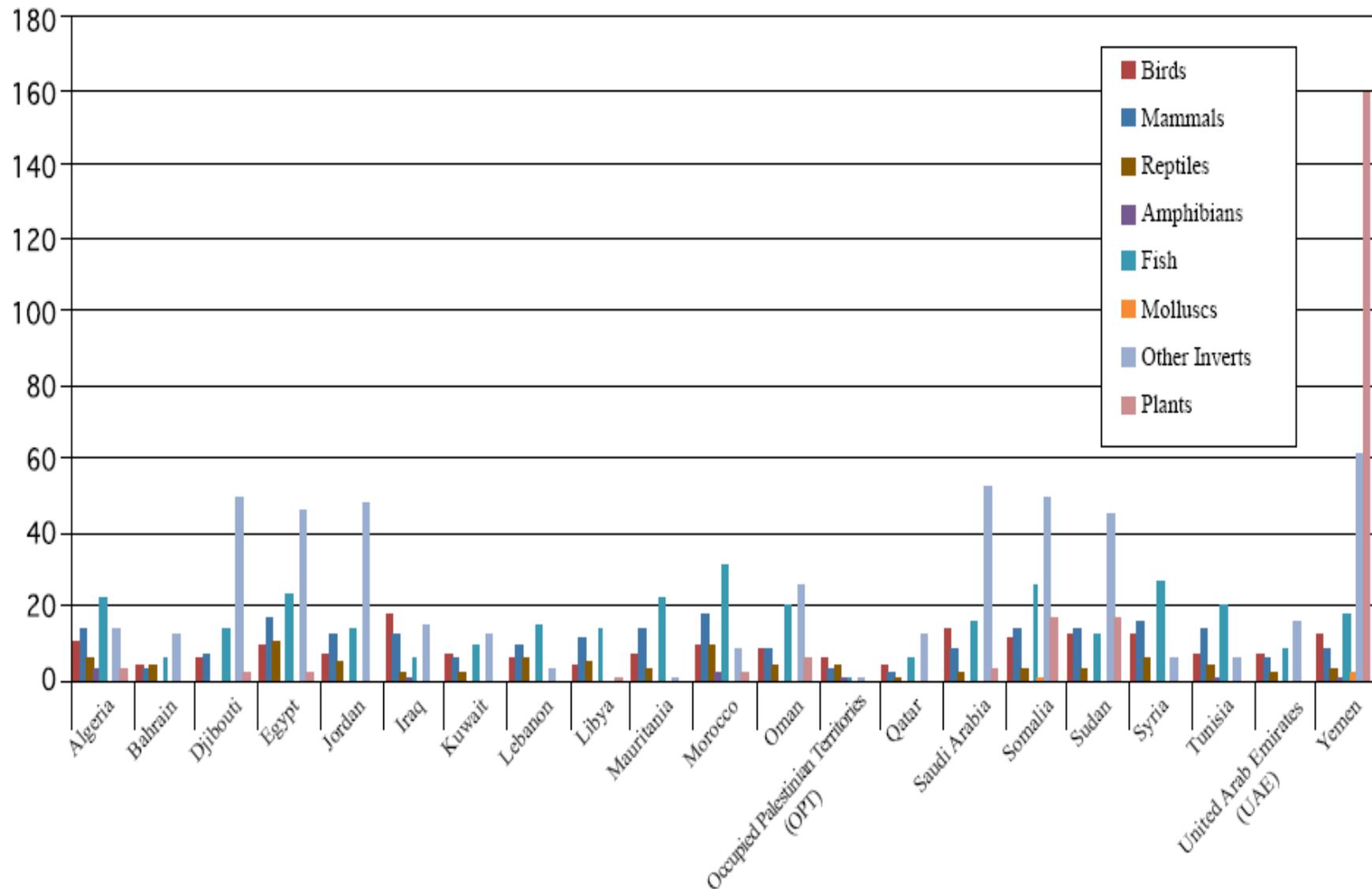


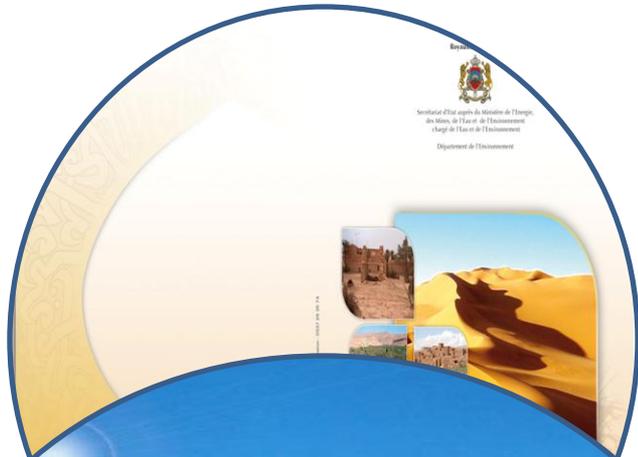
**14 % arable land, 5 % of  
the region is cultivated**

The image shows a vast expanse of dry, cracked earth. The ground is covered in a dense network of irregular, polygonal cracks that have formed as the soil dries and shrinks. The color of the soil is a light tan or beige. The overall appearance is one of extreme aridity and land degradation.

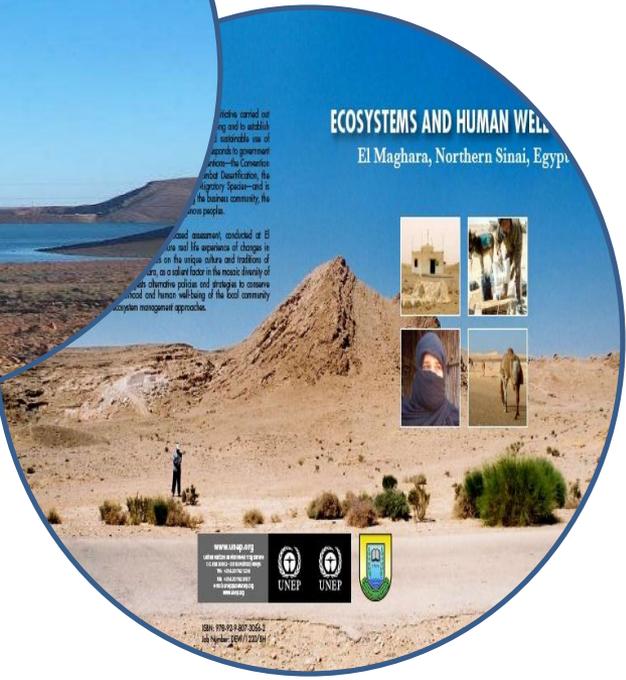
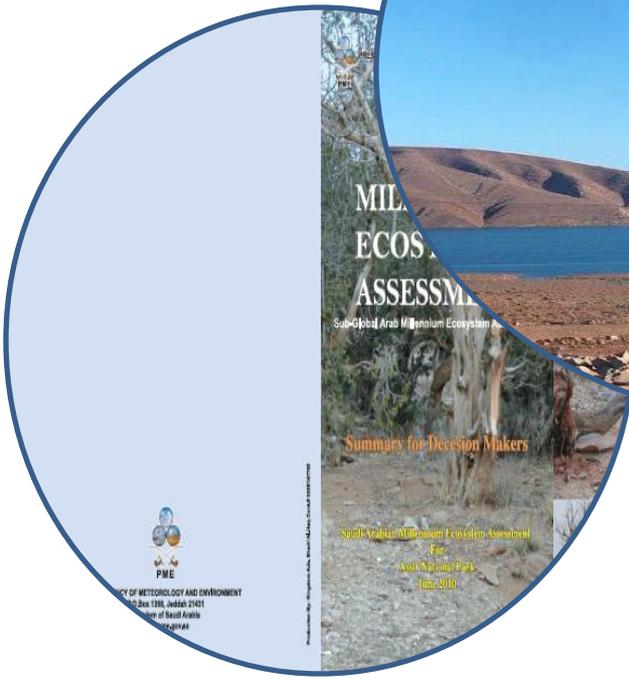
68 % of the land area of the region is degraded

## Threatened Species in Arab countries





# ARAB MILLENNIUM ECOSYSTEM ASSESSMENT Synthesis Report



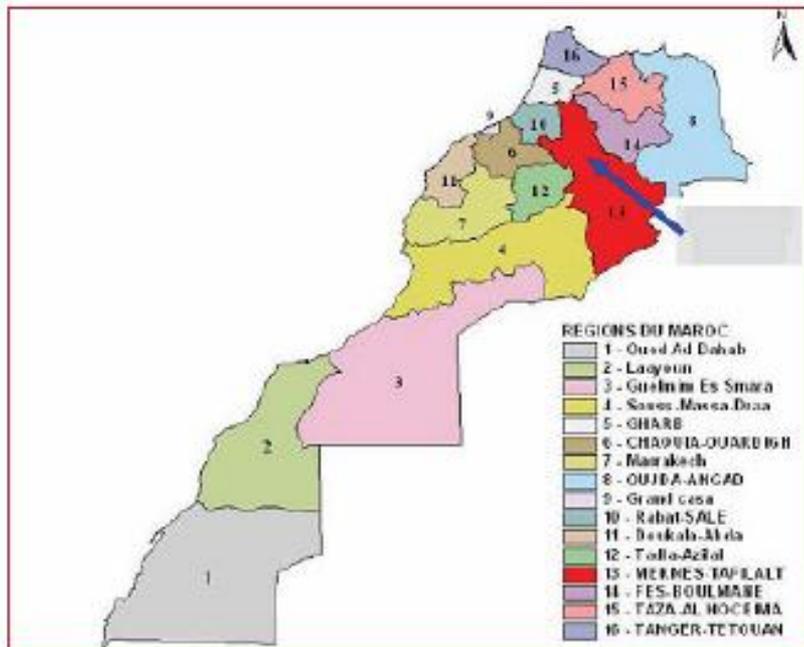


Figure 1.8 Map of Morocco, and site of Tafilalet Assessment

Source: UNEP

Royaume du Maroc



Secrétariat d'Etat auprès du Ministère de l'Énergie,  
des Mines, de l'Eau et de l'Environnement  
chargé de l'Eau et de l'Environnement

Département de l'Environnement

AKWAS Creation - 0537 26 95 74



Evaluation  
de l'Ecosystème  
Oasien de

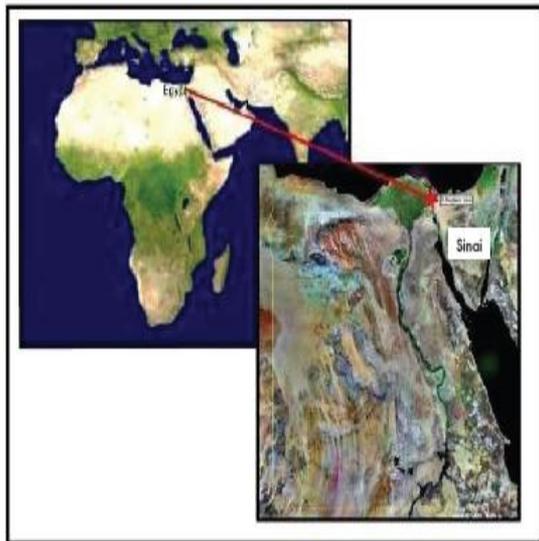
# Tafilalet

Résumer



Observatoire National de l'Environnement du Maroc  
9, Avenue Azar, secteur 16 Hay Riad Rabat  
Tel : 0537.57.06.39 • Fax : 0537.57.66.42  
[www.environnement.gov.ma/onem](http://www.environnement.gov.ma/onem)

Juin 2010



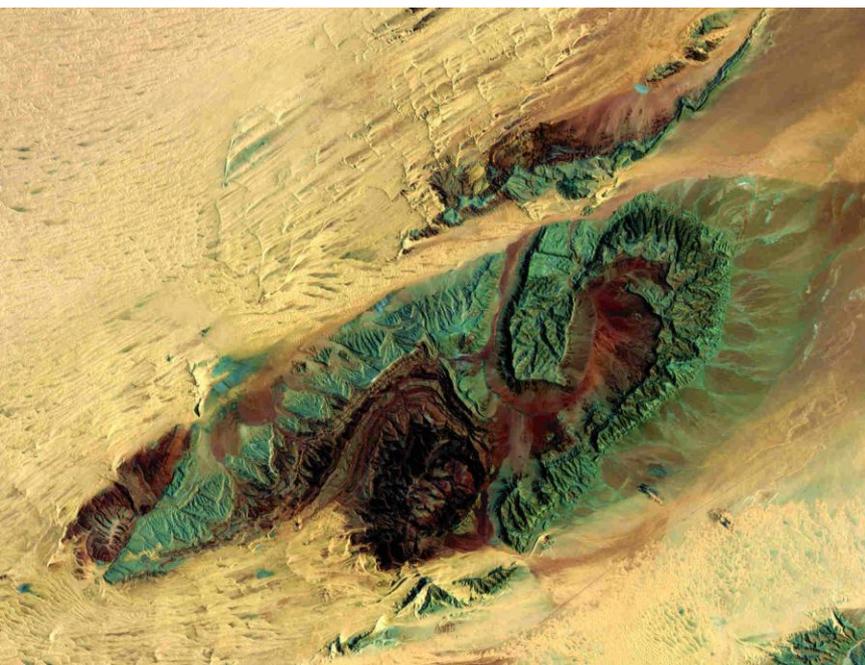
# ECOSYSTEMS AND HUMAN WELL-BEING

El Maghara, Northern Sinai, Egypt



Figure 1.5 Location map of El Maghara area with reference to the Middle East region

Source: UNEP



## Kingdom of Saudi Arabia



Figure 1.7 Map of Saudi Arabia, showing the location of Asir Province

Source: PME

PME

PRESIDENCY OF METEOROLOGY AND ENVIRONMENT  
P.O.Box 1355, Jeddah 21431  
Kingdom of Saudi Arabia  
[www.pme.gov.sa](http://www.pme.gov.sa)

Production By: King Fahd

PRESIDENCY OF METEOROLOGY AND ENVIRONMENT  
KINGDOM OF SAUDI ARABIA



# MILLENNIUM ECOSYSTEM ASSESSMENT

Sub-Global Arab Millennium Ecosystem Assessment

Summary for Decision Makers

Saudi Arabian Millennium Ecosystem Assessment  
For  
Asiatic National Park  
June 2010



# **Social and Economic Drivers**

# Population growth



# Urbanization





# Grazing



# Agriculture



# Poverty and Unemployment





## Mining

## Fuel



# Ecosystem Services



**Provisional , Agriculture and Food Production**



Provisional, Water



*Blepharis edulis* (acanthaceae)  
Gebel El Maghara

# Other Services

- **regulatory**  
**water regulation**
- **Cultural**
  - **Ecotourism**
  - **Educational**
  - **Aesthetic**

# Responses

- **Most responses are technical and on capacity building**

# Proposed Responses

- **Regenerating ecosystem**
- **Human resources development**
- **Institutional reforms**

**Each one to be supported by three components:**

- **Information and Monitoring measures**
- **Corrective and preventive actions**
- **Supportive procedure to assure the successful attainment of the subgoals of each components**

# Key Lessons

- **Assessments need to respond to actual needs and address the policy questions of decision makers, and the fulfillment of the needs of the local communities**
- **Social factors constitute the major pressures and need to be addressed, such as poverty and unemployment**
- **Examine working and successful policies at the local level for up scaling and replication**
- **Adopting principles of good governance is critical to ecosystem management**
- **Local inhabitants are not involved in the decision making process their engagement is critical for sound ecosystem management**
- **Capacity building is essential**

# Engaging and consulting with local communities





Degradation of many services can be reversed by 2050

In 2000, of the four RIA scenarios, only two were degraded. Degradation scenarios were eliminated for 2050.









# UNEP-Live

To create and share knowledge  
for environmental assessment



## A Partnership in Progress

Presentation to the Data Working Group: Sustainable Development Indicators  
LAS, Cairo 11-13 November 2012





**UNEP-Live is a web-based platform to promote access to and use of environmental information for keeping the State of Environment under review.**



## News Updates

Water is inseparable from life, with humans and the natural environment linked through the intricacies of the hydrologic cycle and the interdependencies of all life on Earth. When water resources are degraded, they can impact every form of life, including humans.

[Water](#) | [Land](#) | [Atmosphere](#) | [Biodiversity](#) | [Chemicals & Waste](#) | [Cross cutting](#)

# State of the Environment Live

Find Data & Indicators

Emerging Issues

Find Maps & Reports

My Country

Tools & Methodologies

## Partners



# Components of UNEP Live (Web based platform)

**UNEP  
ENVIRONMENTAL  
ASSESSMENT  
REPORTS**  
And Emerging Issues

**DATA AND  
INDICATORS**

**Statistical Data**

**Spatial Data  
(Images, maps)**

**NEAR REAL  
TIME ALERTS**

**Global Environmental  
Alert Service**  
Environmental hot  
spots

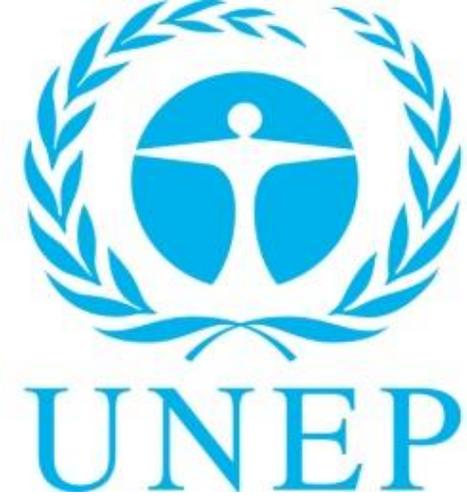
**Citizens  
Observations**

**SOE Live**  
Dynamically  
updated Content  
on the State of  
Environment

Methodology  
Tools  
Collaboration  
and  
Consultation  
Platform

My Country

**Capacity  
building in  
all**



# SOER - LIVE BETA VERSION



# SOER-Live:

SIMPLE, FUNCTIONAL & ROBUST:



SOER-LIVE:

GIS Technology :

### SOE Report-Live

#### REPORT

**EXECUTIVE SUMMARY**  
At the request of the UN Commission on Sustainable Development a survey was carried out to determine sustainable water management using integrated water

1. Countries report improvements to the institutional framework together with important deficits. Some will continue over the next 20 years. This has led for important socio-economic benefits.

2. Institutional framework has major deficiencies. Integrated water management with emphasis on the quality of institutions with a view to sustainable development is not present.

3. Integrated approaches for water resources management and development are critical for progress towards the MDGs. The integrated approach to water resources management is defined as: "A holistic approach that seeks to ensure a green economy in the context of sustainable livelihoods and equity, and to protect and enhance the capacity of ecosystems to support human development and the environment."

4. The survey has demonstrated the progress made with integrated approaches to water resources management as well as the need to continue to improve and enhance the institutional framework for water resources management.

5. The high country responses to the survey demonstrate the need for regional and sub-regional level action to address the institutional framework for water resources management. The survey report has generated a number of specific findings that can inform the process for the next 20 years.

- Air Quality
- Water
- Land Use
- Cultural Heritage
- Enviro Health

#### Indicators

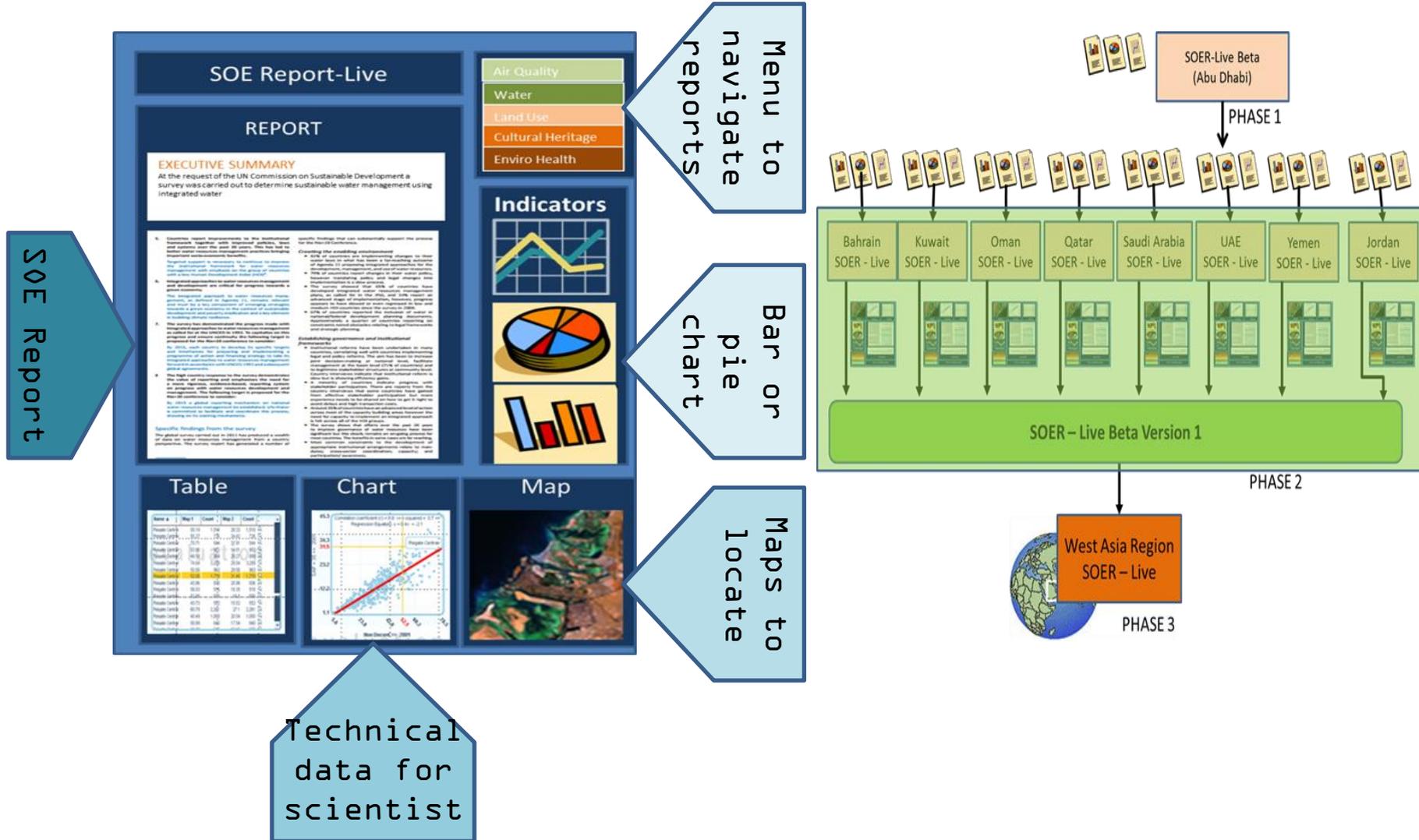
#### Map

#### Table

Water A	Map 1	Map 2	Count
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People Cent	90.12	1.95	20.22
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People Cent	90.10	1.93	20.22
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People			

# Development Strategy

SIMPLE, FUNCTIONAL & ROBUST:





# SPECIAL INITIATIVES

Inaugural Secretariat Meeting  
18-19 July 2012

# Special Initiatives

- **Foundation Initiatives**
  - Eye on Global Network of Networks
  - Eye on Access for All
  - Eye on Environmental Education
- **Thematic Initiatives**
  - Eye on Biodiversity
  - Eye on Community Sustainability and Resiliency
  - Eye on Disaster Management
  - Eye on Oceans and Blue Carbon
  - Eye on Water Security

# **AGEDI Rapid Assessment series**

- Biodiversity**
- Climate Change**
- Blue Carbon**
- Water**

## **Other Assessments and Supporting Activities**

- Second Environment Outlook for the Arab Region**
- Water Vulnerability y to climate change**
- Regional Environmental information Network**
- Sustainable Development Indictors**



*Thank you*

[www.unep.live.org](http://www.unep.live.org)