



Study on Adaptation to Climate Change and Natural Disasters in Greater Alexandria

Workshop on 15-16 June, 2010

Arab Academy for Science Technology and Maritime Transport

Miami Campus

Tamer Abou Gharara, MSc

Project Manager

Arab Academy for Science Technology and Maritime Transport

Presentation Outline

- ❑ Disaster Context at the Arab Academy for Science Technology and Maritime Transport (AASTMT) Against Global Discourse
- ❑ Project Background
- ❑ Project Objectives
- ❑ Organizational Structure
- ❑ Methodology in Brief

Disaster Context at AASTMT Against Global Discourse

- ❑ AASTMT a technical specialized organizations of LAS established in 1972
- ❑ Mandate includes capacity building, research, studies, raising awareness, technology and knowledge transfer in the fields of science aiming at achieving sustainable development in the Arab States
- ❑ Started working on activities related to disaster management in 1990s and on activities related to climate change in 2005 aiming at:
 - A. Promoting DRM in the region and providing technical support in actual disasters
 - B. Strengthening institutional and human capacities
 - C. Providing assistance for emergency plans including simulation of accidents
 - D. Assisting in development and establishment of specialized centers related to DM

Economic Growth

Limits to Growth 1970s
Absolute Limits

Sustainable Development
1987

Earth Summit 1992
Rio de Janeiro

World Summit 2002
Johannesburg

HFA 2005




Project Background

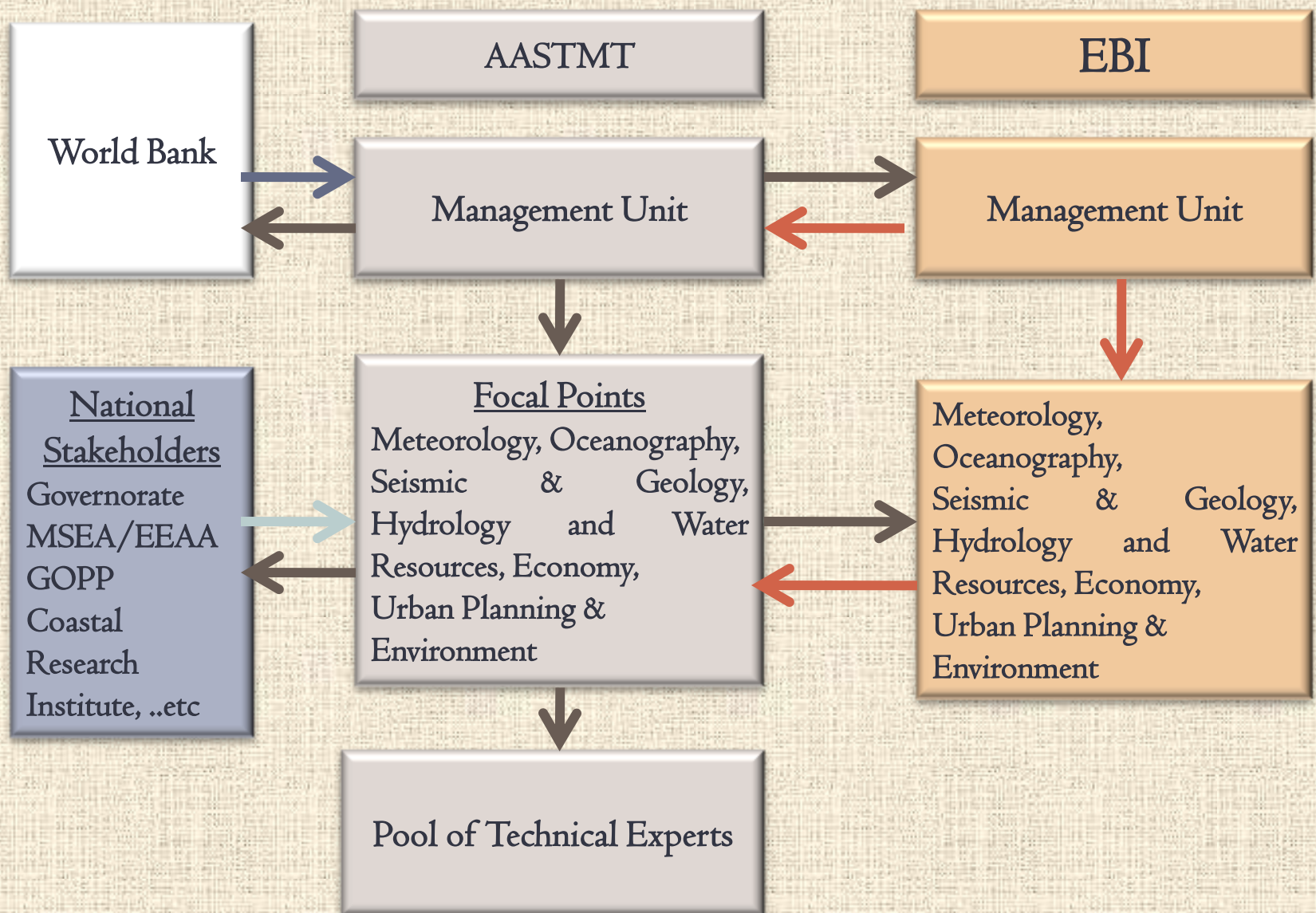
- ❑ Regional study on climate change adaptation and natural disaster preparedness in the coastal cities of North Africa (Alexandria, Tunis, Casablanca and Bouregreg Valley) has been launched in 2008, financed by the World Bank and by the fiduciary funds NTF-PSI, TFESSD and GFDRR managed by the World Bank.
- ❑ The World Bank and (AASTMT) agreed on establishing a partnership for conducting the study – MoU in July 2009.
- ❑ AASTMT provided personnel and researches, data processing and modelling facilities.
- ❑ Contractor was assigned by the World Bank is a consortium led by Egis BCEOM (EBI)
- ❑ European Space Agency provided satellite earth observation services.



Project Objectives in Alexandria

- ❑ Assessment of climate change and natural disaster vulnerabilities of Greater Alexandria by the 2030 scenarios,
 - ❑ Formulation of action plans that improve adaptation of the city to climate change and preparedness to natural hazards,
- 
- The image shows an aerial view of a coastal city, likely Alexandria, Egypt. A prominent curved road runs along the coastline, with several cars visible. To the right of the road, there are modern, multi-story buildings. The sea is a deep blue, and the sky is clear with a few light clouds.
- ❑ Phase I: Assessing the vulnerability of greater Alexandria to the expected impacts of climate change and to the risks of natural hazards. (data collection and analysis – sharing results).
 - ❑ Phase II: Formulating recommendations to increase the adaptation of the city to climate change and its resilience to natural disasters.

Organizational Structure



Methodology in Brief

- ❑ Establishment of the present situation regarding natural risks and the most accurate predictions of changes,
- ❑ Establishment of an accurate GIS mapping of present day Greater Alexandria,
- ❑ Preparation of an urban vulnerability mapping based on the identification of the present and predicted increase in natural risks
- ❑ Assessment of the current urban coverage and the vulnerability of the urban infrastructure assets present on the site.
- ❑ Economic assessment of the capital, human, social, cultural and natural assets that are likely or predicted to be impacted by climate change and natural hazard risks
- ❑ Assessing the roles and activities of national and local institutions in the urban planning, infrastructure provision and disaster preparedness relevant to the Alexandria's urban area.
- ❑ Sharing the results with all national stakeholders for their comments and feedback
- ❑ Formulating action plans

Thank You

Tamer Abou Gharara, MSc

Project Manager

Integrated Simulators Complex

Arab Academy for Science, Technology & Maritime Transport

Telefax : +2 02 22675006

Cell : +2 012 3786798

E-Mail : tamer-abougharara@aast.edu and/ Or tam3219@hotmail.com

