



13-B Environmental Crises and Disasters Management

Introduction

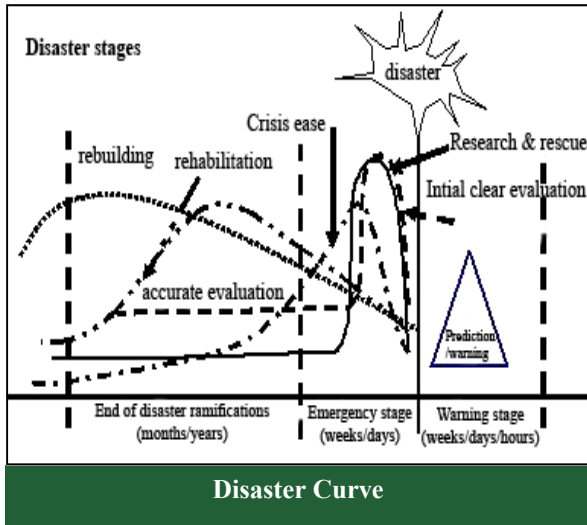
Article 5, Law 4/1994 (on environment protection) stipulates that the Egyptian Environmental Affair Agency (EEAA) “shall set the general policy, prepare plans necessary for maintaining and developing the environment, and follow up their implementation in coordination with the competent administrative agencies.” To achieve its objectives, EEAA has prepared an environmental emergency plan as demonstrated in Article 25 of the same Law and has coordinated with stakeholders for the preparation of environmental disaster confrontation programs.

Egypt’s surface area is approximately one million km² inhabited by more than 70 million people most of whom occupy a small area (about 6%) lying in the Nile Valley and Delta. Thus, these two areas have become the most disasters prone, whether

natural or man-made, entailing a great harm on the surrounding environment.

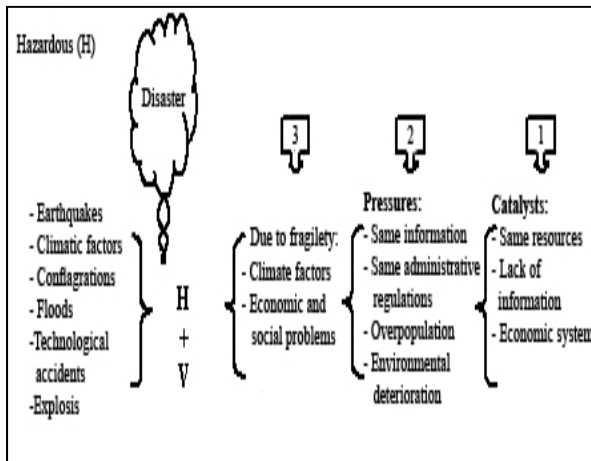
Egypt’s coastal area at the Mediterranean and Red Sea extends for a distance of more than 3,000 km, thus, increasing risk potentials, which may result from different marine activities (marine transport, marine tourism, marine oil and natural gas extraction, fisheries, etc...).

Potential risks in Egypt include all environmental disaster-causing risks, which could be limited to sudden emissions of chemical, radioactive, biological and genetic substances, conflagrations and explosions that may lead to hazardous emissions causing sudden destruction of sensitive ecosystems.

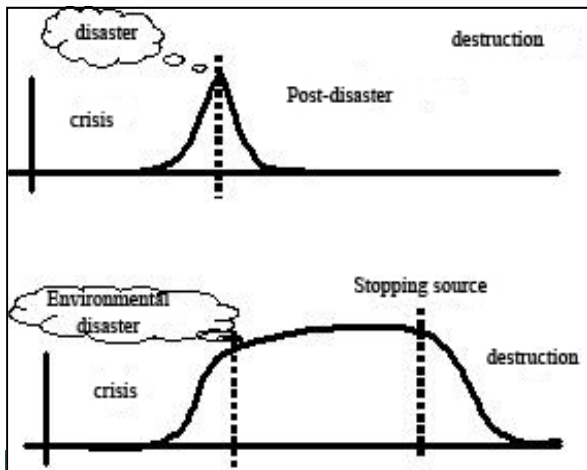


Activities with Potential Risk in Egypt:

1. Industry: such as factories whose activities include using, handling or producing hazardous materials or wastes in large quantities.
2. Transport: land, marine and air transport.
3. Warehouses: huge warehousing facilities for storing chemicals, fuel and other hazardous materials, particularly in airports, ports and urban suburbs.
4. Facilities with radioactive materials: such as nuclear reactors, hospitals and research centers.
5. Waste Dumpsites: waste disposal sites around cities as well as sludge disposal sites.
6. Potable water, wastewater and industrial waste water facilities in large cities.
7. Facilities handling biological and genetic materials such as hospitals and scientific research laboratories.
8. Hazardous wastes generated by industry and other activities.



Factors initiating and triggering disasters



Finding differences between a disaster and an environmental disaster

Additional potential-risk activities include risks of oil pollution resulting from research activities, raw oil exploration, extraction, refining, storing and transporting via a pipeline network in marine areas of Suez Gulf, in addition to the Egyptian pipeline network/ SOMED Company.

Environmental Impact

Environmental impacts of accidents and announced risks include the following:

- Severe live damage.
- Severe damage to the rest of the living organisms (fauna, flora, etc.).
- Severe damage in property.
- Stopping of different activities.

- Change in the characteristics of environmental elements (water, air and soil) rendering them unusable.

Thus, planning to confront emergency accidents that may harm the environment was necessary. In this respect Law 4/1994 has mandated EEAA with the responsibility of developing an Environmental Emergencies Plan (Article 25).

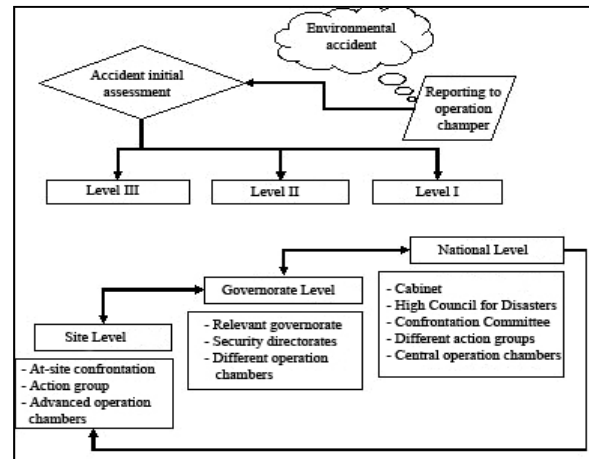
EEAA Environmental Crises and Disasters Confrontation Efforts:

1. A national plan was developed to confront marine pollution resulting from petroleum oil in 1986.
2. The oil plan was updated during 1996-1998.
3. A Central Operations room was established in 1998, anchored in EEAA, for receiving marine pollution accident reports as well as reports on accidents affecting the environment, and to manage oil pollution combat processes in coordination with the Petroleum and Sea Ports Sector combat centers.
4. A general framework for a national emergency plan to confront environmental disasters was finalized in March 2002.

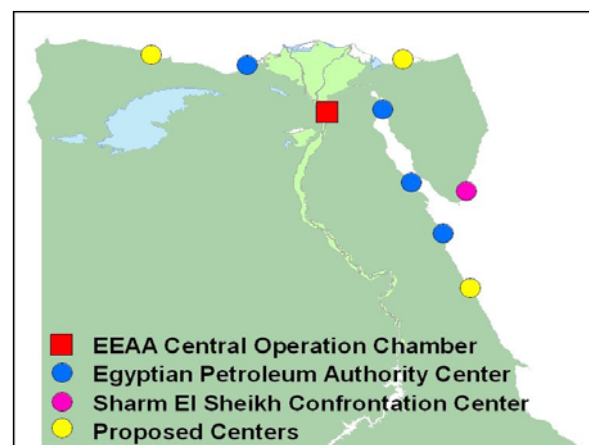
EEAA Efforts in 2004:

1. The Sharm El Sheikh Marine Anti-Pollution Center management and operation have been assigned to a specialized private sector company in order to protect marine environment and fragile ecosystems along the South Sinai coasts in the area from Nabq in the north till Ras Mohamed in the south of Gulf of Aqaba, and from Ras Mohamed in the South till Ras Gara in the North of Gulf of Suez. The Center has been supplied with marine anti-pollution combating

equipment, a combat ship and 3 fast boats. Such equipment suffices to combat 300 tons of spilled oil.



The General Framework



Oil Anti-Pollution Centers

The importance of establishing this Center lies also in protecting different forms of tourism investments (including environmental tourism) from oil pollution resulting from intense marine transport to and from the Gulf of Aqaba.

2. Total Reports Received by EEAA Central Operations Room in 2004 (78 reports):

Number of Marine Pollution Accidents - 2004													
Type of Accident	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Oil Pollution	3	3	4	3	6	7	3	5	1	3	3	6	47
Ships	1	1	3	2		1		4	2		1	2	17
Severe Air Pollution	1	1			1			1			1		5
Misc.	1	3			1	1			1			2	9
Total													78

- Number of oil pollution reports = 47 reports
 - Ship foundering accidents reports = 17 reports
 - Severe air pollution reports = 5 reports
 - Miscellaneous reports = 9 reports
3. Completing the development of the National Plan for Confronting Environmental disasters, it became imperative to activate it through a specialized administration responsible for the implementation of the requirements of article 25 of law 4/1994. Consequently, measures were taken for filling in available posts in the organizational structure of the General Department of the Office of Special Missions and for managing environmental disasters during 2004. The General Department is responsible for:
- Collecting available information locally and internationally on how to confront environmental disasters and mitigate resulting damages; Surveying available potentials on the local, national and international levels and identifying methods to use such potentials to ensure prompt confrontation of disasters; following-up and constant updating of the central operation room and databanks in order to mobilize necessary all potentials for confronting disasters; forming specialized workgroups to follow up on environmental disasters confrontation efforts.
 - Analyzing environmental monitoring systems data for coastal areas, the Nile River, and air monitoring stations located at different parts countrywide; examining analysis to identify early warning signs requiring prompt confrontation by competent authorities to avoid their transformation into environmental crises or exacerbate to the level of environmental disasters.
 - Analyzing reports produced by the Central Operations Room, examining the situation and recommending relevant measures to be taken.