

6 Issues on and Measures Taken for Natural Environment and Development

6.1 Natural Environment

(1) Issues on and Measures Taken for Biodiversity Protection

There is a lack of system in Egypt for collecting scientific data on its rich biodiversity and protecting natural heritage management, as well as degradation of natural environment from tourism, development and waste dumping.

In order to fulfill the obligation of a signatory country for the Convention on Biological Diversity, EEAA established NBU, or National Biodiversity Unit, within its Department of Nature Protection. NBU formulated National Biodiversity Action Plan in 1992 and began implementing National Strategy and Action Plan for Biodiversity Conservation in 1997. Furthermore, NBU established biodiversity bank to promote monitoring and management of biological resources, genetic bank to promote growth of and preserve genetic resources of endangered species, and project for developing Natural History Museum to conduct study and education on Egypt's rich biodiversity.

Proper management of hunting activity is also an important part of protecting biodiversity. There is variety of hunting in Egypt, including sports hunting, tourism, commercial and for living. Excessive hunting is threatening wild life in Egypt. Since 1992, some improvements are seen as to organize sports hunting for game birds in desert and monitoring system for hunting activities.

Other notable efforts include collection of ecological information using GIS and/or remote sensing technologies, management system in the nature protectorates, and introduction of charging fees to enter the protectorates to raise necessary fund for management cost in the protectorates.

These efforts need further improvement in their implementation/enforcement. Constraining factors include lack of funds and expert/dedicated staffs who are well trained in the area. Equally, environmental awareness is fairly weak among general public, which needs quantity of fund and staffs. For example, in the nature protectorates in Red Sea, facility like berthing facilities for patrol boats, and navigators for patrolling airplane body are inadequate.

EEAA has formulated five-year plan for 2000-2005 for achieving proper management of natural environment and protecting biodiversity.

Table 6.1: The Main Programs of the Five Year Plan (2000-2005)

Main Programs	Term
Improving the natural protectorate networks for urgent ecological systems	2000-2005
Using up to date technologies in improving, administrating, managing and conserving the natural protectorates	2000-2005
Upgrading the economics activities inside the protectorates	2000-2005
Establishing the Egyptian natural history museum	2000-2010
Establishing a national genetic center for inherited resources	2000-2005
Establishing a center for increasing the number of rare plants and animals, specifically those threatened by extinction	2000-2005
The national program for research and monitoring in the field of biodiversity	2000-2005
Encouraging eco-tourist projects according to the recent tourist criteria	2000-2005
Participating in the regional development for South Sinai in collaboration with the European Union	2000-2005
Developing medical plants adapted to arid ecological systems in collaboration with the UNDP	2000-2005
Other including programs	
Prepare an inventory of national biodiversity and natural heritages, and start a monitoring programs	2000-2005
National program for managing hunting	2000-2005
Program for managing natural heritages and resources	2000-2005
Program for international conventions compliance	2000-2005
Program for public awareness, education and training on the issue of natural heritages	2000-2005
Program for managing national wetland	2000-2005
Program for managing national marine and coasts	2000-2005
Program for managing national arid land	2000-2005
Program for managing and developing nature-based tourism	2000-2005

Source: The National Environmental Action Plan of Egypt 2002/17

(2) Issues on and Measures Taken for Forest Protection

1) Issues on and Measures Taken for Afforestation

Followings are main activities in afforestation projects.

- Use of treated wastewater in existing man-made forest.
- Research in seeding of trees (improving germination rate and preserving genetic characteristics)
- Introduction of new species (for higher economic yield)
- Enactment of afforestation legislation (clarify the importance of plantation in safeguarding food safety)
- Use of latest technologies such as drip irrigation and sprinklers in afforestation site.
- Introduction of new technologies for wastewater treatment, farming in salty land, and seed production.

Lack of sufficient fund is one of constraining factors contributing for afforestation project.

Examples of international assistances / projects:

- Afforestation projects are carried out with financial support from following institutions: ITTO, USAID, UNDP, WB, GTZ, WFP, FAO, MALR and other institutions.

Table 6.2: Major International Donors and Their Projects

Donors/Aid Institutions	Projects
Food and Agriculture Organization (FAO)	Egypt is a member of Near East Forestry Commission of FAO.
International Tropical Timber Organization (ITTO)	Afforestation of Serabium and Al-Kharga with Japanese support.
	Assessment and management of mangrove forests in Egypt for sustainable utilization and development
Japan (Private companies)	Utilization of sewage treatment technology with Effective Microorganisms (EM).
	Utilization of cultivation system for soil with high salinity content from fertilizer and biological agrochemicals.
France	Utilization of seed producing technology by nitrogen fixation.

6.2 Ambient Air Quality

Following section mainly discusses EEAA's effort to tackle issues on air quality degradation in Egypt.

Air Pollution

Regarding air pollution, following actions were listed in the National Environmental Action Plan of Egypt 2002/17.

1. Forming a strategy for controlling pollution and preventing smog episodes
Formulate a comprehensive strategy for controlling pollution and episodes with the results of two major projects: CAIP by USAID and EIMP by DANIDA.
2. Managing auto exhausts in urban and rural areas
Development of vehicle emission testing facilities and promotion of the use of CNG as a vehicle fuel. Lead-free gasoline has been introduced in Egypt.
3. Protecting air quality in rural area
Minimize open burning of agricultural waste and reduce exposure to pesticides and herbicides.
4. Reducing pollution from industrial activities within human settlements