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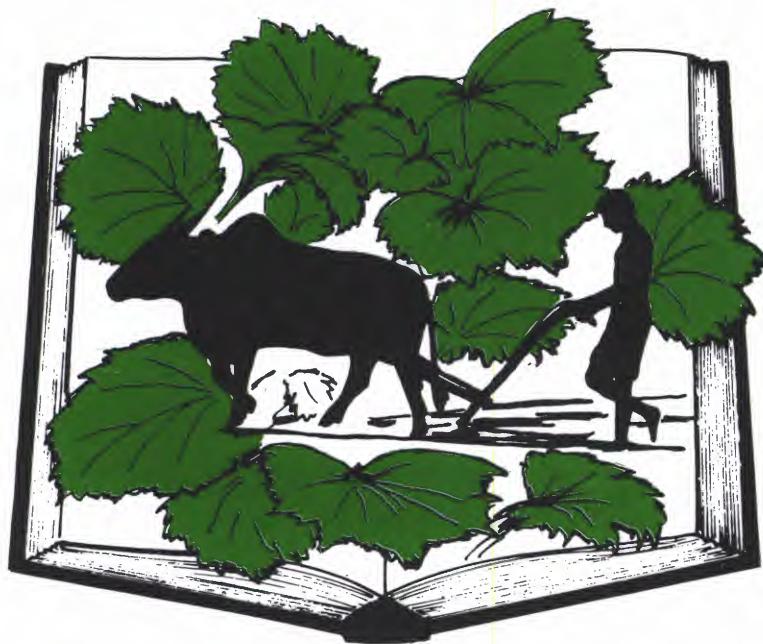
NORWEGIAN CENTRE FOR INTERNATIONAL AGRICULTURAL DEVELOPMENT  
AGRICULTURAL UNIVERSITY OF NORWAY

## **VURDERING AV MILJØPLAN FOR EGYPT**

**Rapport til NORAD**

Per Wegge og Øystein Holand

Oktober 1991



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NORAGRIC  
Boks 2,  
Her

8 October, 1991

**RAPPORT: VURDERING AV MILJØPLAN FOR EGYPT**

For oppdraget forelå det en generell "Terms of Reference" fra Dr. Hisham El Sherif, Advisor to the Minister for Cabinet Affairs and Minister of State for Administrative Development, diktert til den norske ambassaden umiddelbart før avreise:

- " 1) Review and rephrase the documents which have been prepared by each team member regarding specific areas of pollution.
- 2) Advise on areas of improvement.
- 3) Highlight potential areas of the strategy - on the programme and project level - that are missing."

Dette ble godkjent av NORAD/NATUR som retningsgivende for oppdraget og på grunn av kort tidsfrist meddelt oss pr. fax og telefon dagen før avreise.

Kort om bakgrunnen for oppdraget

Under drøftingene i Consultative Group i Paris i juli i år ble Egypts gjeldsbyrde betydelig redusert. Egypt ble samtidig anmodet om å utarbeide en landsomfattende miljøplan før endelig standpunkt til finansiering av en rekke utviklingsprosjekter under utarbeidelse ble tatt. Verdensbanken var på møtet i Paris oppnevnt som koordinerende organ for utarbeidelse av Miljøplanen, og et team fra WB skulle møte i Cairo i slutten av september for å gjennomgå det første planutkastet. Under et besøk i Cairo den 17.9 d.å. ble Direktør Grimstad anmodet om å bistå med norsk ekspertise til dette arbeidet.

Gjennomføring

Vi oppholdt oss i Cairo i en uke (27.9-4.10). Programmet framgår av vedlagte notat (vedlegg 1).

Information and Decision Support Center (IDSC), direkte under the Cabinet, var koordinerende vertskap og arrangør for møtene. Miljøvernarbeidet i Egypt koordineres gjennom "Egypt

Environmental Affairs Agency" (EEAA), også direkte under the Cabinet. Under presentasjonen av de ulike delrapportene utarbeidet av de egyptiske ekspertene deltok ledende representanter fra EEAA og IDSC samt representanter fra WB, DANIDA og NORAD.

Allerede under det første orienteringsmøtet mellom IDSC og de utenlandske konsulentene (WB/NORAD/DANIDA) den 28.9 ble man enige om at prosjekter ikke skulle drøftes. Arbeidet skulle konsentreres om gjennomgang av de ti delrapporter på sentrale fagfelt og den videre integreringen av disse i et mer samlet planutkast for en miljøplan. Dette var nødvendig da det ikke forelå noe utkast til en samlet miljøplan og de fleste rapportene inneholdt en rekke forslag til konkrete prosjekter, i tillegg til mer generelle omtaler av sakskomplekset.

Egypts Minister for Cabinet Affairs (og samtidig landets miljøvernminister) Dr. Atef Ebeid åpnet det formelle møtet dagen etter og bekreftet intensjonen med de påfølgende møter: "tilbakemelding til gruppene om innholdet i delrapportene og forslag til revisjon av disse, samt forslag til en ramme for en samlet miljøplan".

I to dager ga de ti oppnevnte egyptiske ekspertgruppene muntlige orienteringer om sine rapporter. Disse var nokså detaljerte og kommenterte i stor grad rene prosjektforslag innen sine sektorer.

Etter at alle delrapporter var gjennomgått ble det holdt et koordineringsmøte mellom Verdensbanken og de fire nordiske konsulentene for å oppsummere inntrykk og forene synspunkt omkring det videre arbeidet. Det var generell enighet om opplegget: behov for revidering av de enkelte rapporter og forlengelse av tidsrammen for utarbeidelse av endelig miljøplan.

Den tredje dagen hadde Dr. Ebeid innkalt Verdensbanken og de nordiske deltakerne til en uformell drøftelse umiddelbart forut for et bredere anlagt møte med potensielle donorer. Sistnevnte kom nokså bardus på både de nordiske konsulentene og Verdensbanken, da det ikke var nevnt noe om et slikt møte tidligere. Der ble Dr. Ebeid orientert om vårt felles syn på den pågående miljøplan-prosessen: at arbeidet var kommet (godt) igang, men at det gjensto betydelig arbeid både på de enkelte rapporter og på selve miljøplanen. Vi diskuterte deretter framdriften for det videre arbeidet og ble enige om en foreløpig tidsplan for avslutning av rapportene, en workshop i desember, og sammenfatning av den endelige Miljøplanen i februar-mars.

Under det påfølgende "donor-møtet" var ca. 40 personer tilstede, hovedsakelig inviterte fra stedlige ambassader, inklusive en representant fra den norske ambassaden og internasjonale organisasjoner. Dr. Ebeid orienterte om den pågående "miljøplan-prosessen" og inviterte potensielle donorer til å komme med innspill og delta med synspunkter i

det videre planarbeidet. Teamleder Mr. Anan Seth fra Verdensbanken oppsummerte arbeidet og oppfordret om økonomisk støtte til konsulentbistand for oppfølgingsfasen. Donorene fikk utlevert skjemaer hvor de kunne krysse av eventuelle fagfelt av interesse og mulig økonomisk bistand til planarbeidet, for tilbakesending til EEAA senere. Om etter-middagen holdt EEAA et møte med gruppelederne for rapportene og WB/NORAD/DANIDA om oppfølgingsarbeidet. EEAA presenterte der et tidsskjema og orienterte om en egyptisk Task Force som skal ha ansvaret for planarbeidet framover (vedlegg 2). Det ble enighet om at et ekspert-team fra Verdensbanken skulle slutte seg til den egyptiske gruppen i midten av november og samarbeide om slutföringen av de ti delrapportene forut for en internasjonal workshop berammet til begynnelsen av desember. Foruten slutföring av del-rapportene skal også det første utkastet til en Master Plan foreligge ved denne workshopen.

Femte dag gikk vi igjennom de utleverte rapporter mer i detalj og utarbeidet en rapport om våre synspunkter på delrapportene og Master plan prosessen for EEAA (vedlegg 3 og 4). Director Salah Hafez i EEAA hadde anmodet om et avsluttende møte med oss før tilbakereise for å diskutere miljøplan-arbeidet. På vår forespørsel ble det gjort klart at EEAA ønsket et slikt møte med oss alene og at vi skulle rapportere direkte til EEAA og ikke til Verdensbanken, ei heller sende kopier dit. Med god hjelp fra den norske ambassaden som hadde en IBM kompatibel printer for vår medbrakte PC rakk vi å skrive sammen en rapport for overlevering til EEAA torsdag ettermiddag.

Under det avsluttende møtet med Director Hafez og IDSC gikk vi muntlig gjennom våre viktigste synspunkter nedfelt i rapporten. Vi fikk det bestemte inntrykk at vår input og kommentarer ble verdsatt og ville bli vurdert i det videre planarbeidet og i egypternes videre samarbeid med Verdensbanken. Det ble ytret ønske om at vi skulle komme tilbake senere og fortsette i plan prosessen.

#### Sluttkommentarer

Våre egne inntrykk om det pågående planarbeidet kan oppsummeres slik:

1. Verdensbanken hadde påtatt seg å koordinere arbeidet med en miljøplan for Egypt. Denne oppgaven hadde WB ikke utført tilfredsstillende: Terms of Reference for delrapportene var ikke klare nok med det resultat at rapportene som ble framlagt var uferdige. Verdensbanken syntes å erkjenne dette og tar nå sikte på å spille en mer aktiv rolle i oppfølgingen. Det er også mulig at Verdensbanken har forsøkt å påvirke egypterne under forarbeidet med rapportene, men at Egypt har vært noe avvisende og valgt å "kjøre sitt eget løp". Imidlertid tolker vi situasjonen slik som først antydet.
2. Verdensbanken var tydelig overrasket over at fire eksperter fra NORAD og DANIDA dukket opp under disse møtene. I alt 6

personer fra WB var tilstede mesteparten av tiden. Det ble ikke tatt noe aktivt initiativ fra WB om å inkorporere de nordiske konsulentene i det pågående arbeidet. Det lille samarbeidet som foregikk ble gjort mer av formelle høfighetshensyn enn av genuin interesse for å trekke "våre" synspunkter inn i arbeidet.

3. De danske og norske representantene hadde helt sammenfallende syn på planarbeidet: arbeidet hittil har vært altfor prosjekt- og sektor-orientert og har ikke i tilstrekkelig grad inkorporert naturgrunnlaget og miljøhensyn i en framtidsrettet forvaltningsstrategi (se vedlegg 3 og 4). Vi gjorde gjentatte henstillinger til WB om nødvendigheten av å utvide TOR for delrapportene og dessuten utarbeide to eller tre tilleggsrapporter på temaer som ikke var blitt berørt. WB var ikke særlig positiv til dette, men mente at ubehandlete fagfelt kunne inkorporeres i de foreliggende rapportutkastene. EEAAs viste mer forståelse for våre synspunkt og det gjenstår å se om våre tilrådninger vil bli fulgt. Grunnen til at WB var tilbakeholdne skyldtes trolig først og fremst tidsfaktoren; man ville unngå unødige forsinkelser i den påstartete prosessen.

4. EEAAs klare signal om at man ønsket vår rapportering direkte til Egypt og ikke via Verdensbanken tolker vi som uttrykk for at EEAAs ønsker å stå fritt vis-a-vis Verdensbanken når det gjelder prioritering av hvordan miljøplanen skal utformes. Vi ser heller ikke bort fra at nettopp invitasjonen til DANIDA og NORAD om å delta i møtene var en måte å markere overfor Verdenbanken om at Egypt ønsker å styre denne prosessen selv.

5. Egypterne selv har ikke noe klart opplegg for hvordan en miljøplan skal utformes. De fokuserer først og fremst på forurensningsproblem og eventuelle tiltak (les prosjekter) som må gjennomføres for å redusere dette. Det er vårt inntrykk at Verdensbanken i vesentlig grad støtter opp om en slik kortsiktig tilnærningsmåte. EEAAs erkjente at de ikke har den nødvendige kompetanse til å skrive sammen den endelige planen etter nyttår. Det er derfor meningen at Verdensbanken skal stille ekspertbistand til disposisjon for sluttføringen av planen. Med mindre man lykkes i å utvide perspektivet til en mer langiktig miljøstrategi der selve produksjonsgrunnlaget og primærnæringene blir trukket mer fram, er vi redd miljøplanen stort sett vil bli en "opprydningsaksjon" mot forurensning uten tilstrekkelig forbindelseslinjer til bærekraftig utvikling.

6. Danmark har store interesser i Egypt. Det ble antydet et finansieringsnivå på ca 150 mill. USD de neste fem årene knyttet til miljøsektoren. Danmark er allerede involvert i miljø-prosjekter og tilbød ekspertbistand for det videre arbeidet med miljøplanen. Denne støtten vil gå gjennom Verdensbanken. Danskenes antydet overfor oss at de var særlig interessert i å yte bistand innen vann- og luftforerensning.

7. Vi ble sterkt oppfordret til å være med i det videre planarbeidet, men henviste til at dette spørsmålet måtte reises direkte med norske myndigheter.

8. Det er vårt inntrykk at miljøproblemene i Egypt er store og kompliserte, at Egypt har et forholdsvis dårlig "tak" på problematikken med et svært ineffektivt institusjonelt apparat til å håndtere sakene, at Verdenbanken vil bidra aktivt til en god - men kortsiktig og krise-orientert - aksjonsplan, og at Norge har gode forutsetninger for å kunne bidra til en god miljøstrategi og senere med velfunderte prosjekter, spesielt innen forurensning, oljeverberedskap og miljøteknologi.

Tilslutt vil vi få takke NORAD for anledningen til å delta på møtene i Egypt, som forøvrig foregikk i en positiv og konstruktiv atmosfære. Vi vil også rette en takk til den norske ambassaden for den praktiske assistanse som ble ytet.

  
Per Wegge og Øystein Holand

Vedlegg:

1. Møter og Arbeidsprogram
2. Task Force, medlemmer av ekspertgruppene og tidsplan for Miljøplanarbeidet framover
3. Rapport til Egypt Environmental Affairs Agency
4. Disposisjonsutkast for Egypts miljøplan.
5. Liste over sentrale personer møtt under konsultasjonene.



Vedlegg 1

**MØTER OG ARBEIDS PROGRAM**

**LØRDAG 28.09**

- 10<sup>00</sup> - 12<sup>00</sup>: Møte med ledelsen i Information and Decision Support Center (IDSC).  
12<sup>00</sup> - 15<sup>00</sup>: Møte med representanter for IDSC, WB, DANIDA og NORAD.  
16<sup>00</sup> - 18<sup>00</sup>: Arbeidslunsj sammen med representantene for DANIDA.

**SØNDAG 29.09**

- 9<sup>00</sup> - 10<sup>00</sup>: Orientering om arbeidet med miljøplanen ved Dr. Atef Ebeid.  
10<sup>00</sup> - 20<sup>00</sup>: Presentasjon av de 5 første ekspert rapportene.

**MANDAG 30.09**

- 9<sup>00</sup> - 19<sup>00</sup>: Presentasjon av de 5 siste ekspert rapportene.  
20<sup>00</sup> - 22<sup>00</sup>: Koordineringsmøte med representanter for WB, DANIDA og NORAD.

**TIRSDAG 1.10**

- 9<sup>00</sup> - 10<sup>00</sup>: Oppsummerings møte mellom representanter for IDSC, EEAA, WB, DANIDA og NORAD ledet av Dr. Ebeid.  
10<sup>00</sup> - 13<sup>00</sup>: Møte med representanter for de ulike donor-organisasjonene.  
16<sup>00</sup> - 18<sup>00</sup>: Møte med EEAA's ledelse, EEAA's "task force", lederne for de 10 ekspertgruppene samt representanter for WB, DANIDA og NORAD.

**ONSDAG 2.10**

Arbeid med rapportering.

**TORSDAG 2.10**

- 10<sup>00</sup> - 12<sup>00</sup>: Presentasjon av vår rapport for EEAA's "task force".  
12<sup>30</sup> - 14<sup>00</sup>: Møte med ambassadør Mørkved.  
14<sup>30</sup> - 16<sup>30</sup>: Møte med ledelsen i EEAA og presentasjon og overlevering av vår rapport til EEAA's direktør Hafez.

## **TASK FORCE SCOPE OF WORK**

1. Thorough Review and follow up on the implementation of World Bank recommendations in the ten areas.
  - a. adding depth (all areas & strategic perspective)
  - b. adding new dimensions or missing areas. (environmental economics, socio-economic, etc)
2. Coordinating with World Bank to ensure the implementation of the environmental action plan process in due time.
3. Laisoning and coordinating with Egyptian teams to guarantee quality improvement and timely delivery
4. Coordinating the integration process of the ten background reports into the Master Plan.
5. Coordinating and Supervising the editing process
6. Supervising the printing activities related to the Master Plan and all promotional material.
7. Organizing the workshops, donors meetings and conference.

Environment Master Plan- Time Table

Environment Master Plan- Time Table

**Working Papers/Studies  
Groups Members**

Ser.	Name of Study/Group	Members of the Group	Position
1	Forestation	Eng. Hazem El Abd Eng. Mohamed K. Nadaa Dr. Mahmoud Affifi	Director Central Agency for Reconstruction First Undersecretary Ministry of Public Work & Water Resources Desert Research Center
2	Development of public gardens in Urban Areas	Dr. Mamdouh Riad Mr. Fekry Aboul Novr	Director Central Department for trees EEAA (Green areas)
3	Water Resources Better Management	Dr. A. El Gazaar Dr. M. Abou Zeid Eng. M. Nigm	Director of sugar & distillation Co. Director of Water Research Center Director Research Dept., National agency for potable water
4	Air Pollution	Dr. M. Nasr Allah Eng. M.F. Swelam	Prof. Air Pollution Dept., National Research Center. Director of Organization of Pollution Control (fighting)  Gen. M. El Bialli Mr. H. Badran Mr. I. Barakat Mr. Magdi Kamel

## Working Papers/Studies Groups Members

Ser.	Name of Study/Group	Members of the Group	Position
5	Cultural heritage and National Resources	Dr. M. Person Mr. A. Shehata Dr. F. Abdel Halim	Consultant, EEA EEAA EEAA
6	Shores protection and Marine Life	Dr. H. Badawi Dr. A. El-Beltagi Dr. A. Fawzi	Director National Center for Sea Science Prof. National Center for Sea Science
7	Solid Waste & Toxic Material	Dr. M. Eid Dr. M. El-Halwagi Dr. A. El Shafie  Eng. A. Mustafa Dr. A. Abdel Gawad	Consult, EEA Academy for Scientific Research & Technology Director of Environment Health & Monitoring Center General Organization for Industrial (GOF) Prof. Faculty of agriculture
8	Educational, Cultural institutions, Media & NGOs	Mr. M. Abbas Mr. K. El-Khatib Dr. M. Selim	Union of TV & broadcast First under secretary Ministry of Education Prof. Faculty of Education
9	Management of Environmental Resources	Dr. A. El-Gamal Dr. A. Nazif Mrs. H. Hanafi  Eng. Gamal Lotfy	Consultant EEA Executive Director of IDSC Director Central Department for Information EEAA IDSC
10	Population growth & the Environment	Mr. A. El-Abidin  Dr. El-Sayed Dohaya Mr. T. Abdallah Mr. A. Gharib	First under secretary Ministry of Administrative Development Planning Sector Director General, CAPMAS IDSC

**TASK FORCE MEMBERS**

**TASK FORCE HEAD : MR. SALAH HAFEZ**

- \* Environment Dr. Tarek Genena
- \* Environmental Economist Dr. Khaled Fahmy
- \* Economist Int. Consultants
- \* Institutional Management Int. Consultants
- \* Coordination Mrs. Effat El Shooky  
Mr. Amin Lotfy

Vedlegg 3

Egypt Environmental Affairs Agency (EEAA),  
11(A) Hassan Sabry Str.,  
Zamalek, Cairo

The Royal Norwegian Embassy  
Cairo

3 October, 1991

**RE: ENVIRONMENTAL MASTER PLAN FOR EGYPT**

**Input from the Norwegian Agency for Development  
Cooperation (NORAD)**

We hereby submit some general comments and recommendations on the ongoing process of developing an Environmental Master Plan for Egypt. We find it appropriate to do so under the following three headings:

**1. The evolution of an Environmental Master Plan**

The discussions and available documentation have focused on the degraded state of the environment and the immediate threats to the natural resources, with a main emphasis on problems related to water and air pollution. Undoubtedly, in the short term, there is now an urgent need to mobilize resources to combat pollution and thereby halt and hopefully reverse its degrading effects on the environment.

However, it is equally important to consider the natural resources, and their utilization, in a longer time perspective. By some decision-makers, conservation measures are often considered a constraint and cost to be paid for implementing conventional development programmes. It is imperative that environmental conservation and economic development not be looked upon as opposing and mutually exclusive objectives, but rather as complementary elements in a longer-term development strategy. In the follow-up exercises we strongly recommend that the Master Plan be

linked to this broader perspective of national economic and social development and not be restricted to merely restoring and conserving biological processes.

## 2. The 10 group reports

### a) General Comments:

The reports are basically descriptive and provide a good data base for the subsequent analysis during the next revision and integration phase. Preferably, the group papers should have addressed major natural resources (i.e., water, land, air, energy) and biological production systems (agriculture, fisheries, etc). However, we recognise that thematically most of these components have been touched upon in the existing reports. Therefore, we do not recommend any major revisions of the documents, except for the preparation of three additional group papers:

- **Agriculture.** This biological production system is important for rural development and is at the same time threatened by many factors (sustainability of water and soil resources and land use). The extent and consequences of excessive use of fertilizers, herbicides and pesticides should be included. Other key questions are type of crop plants and irrigation techniques, particularly how it contributes to salinization.
- **Freshwater Fisheries and Aquaculture.** This is another important biological production system which is highly sensitive to both quantity and quality of water. Linkage to the freshwater regime and the reduced rate of sedimentation in the lower Delta should be highlighted.
- **Energy.** Both renewable energy sources (hydro-electricity, bioenergy), fossil fuels, and alternative energy (mainly solar) should be quantified (potential, reserves and consumption rates), and environmental implications of their use assessed. Similarly, the current state of energy efficiency need to be evaluated. Much information on fossil energy is already contained in the group report on air pollution.

**Marine and Estuarian Fisheries** is another important biological production system. This issue has partly been addressed in the coastal zone and marine resources paper, and should rather be elaborated upon in that paper.

Two group reports - Afforestation and Public Gardens - basically address the same problem of restoring vegetative cover and should therefore be combined into one single paper.

This will lead to a total of 12 group reports instead of 10. In our opinion this will secure a more comprehensive coverage of the main environmental issues.

In order to achieve comparable presentations, each group should follow a standardized Terms of Reference. Hence, all group reports should include statements on the following:

- Institutional framework
- Constraints (legislation, social, economic)
- Enforcement (mode and efficiency)
- Environmental threats
- Predictions regarding future development
- Required actions needed to remedy the situation

Most group reports contained a set of project proposals of high quality and with much relevant information. These projects should prioritize on the basis of conservation "urgency" and cost efficiency analyses. We recommend that all these projects be presented in a separate volume (Investment Programme, see below).

**b) Comments on individual group reports:**

(Some of our comments may be irrelevant as we may not have had access to all available information).

**Groups 1 and 2: Afforestation and Public Gardens**

Much relevant background data was presented. Afforestation is an integrated part of a well functioning infrastructure in the new settlement areas. Similarly, afforestation may help to improve the local and regional climate and act to preserve soil resources, especially along waterways. Increased green vegetation cover in urban areas has positive effects on mental health as well as on the local environment (noise and air). A better justification of these aspects is necessary. An analysis of water consumption with regard to afforestation is also necessary. Choice of tree species with respect to water consumption (incl. quality) and genetic resources must be addressed. Mixed tree farming will also be of interest as part of a multiple use management approach.

**Group 3: Water Management**

Water resources are the most critical natural resource in Egypt. A water budget was presented. However, data on water quality must, if possible, be strengthened. Elaborate on how to use the water efficiently (agricultural crops, irrigation techniques, recycling etc.). Water demand in relation to rural development and land reclamation need to be addressed. Main threats to water quality have to be identified. The ecological and economic consequences on freshwater fisheries, aquaculture, and impact on the Delta region have to be addressed. Data on extent of water-borne diseases and human health and their relationship to pollution need to be discussed. The Nile as the crucial water resource has to be put in a regional context covering the whole watershed. Ground water resources will be of crucial importance for rural development, particularly in the desert region. Recharging

capacity and possible pollution hazards must therefore be considered. A water management plan has to address the question of law enforcement.

#### **Group 4: Air and Noise Pollution**

A well organized paper with a good description of sources and distribution of air pollution was presented. However, if data is available, an elaboration on quantity and quality of emissions would be desirable. The paper included information on consumption of fossil fuels. This may also be used in the suggested paper on energy. Local air pollution, including relevant data on the cement factories, were reported. A more regional and global approach would strengthen the paper. The effects of air pollution on the environment has to be elaborated upon, and estimated cost (health, agriculture, cultural heritage sites etc.) included. The principle of "polluter - pays" has to be discussed and its consequences analyzed. Price policy and taxes on fossil energy has to be discussed as well as the use of alternative energy sources (solar, wind).

#### **Group 5: Cultural Heritage and Natural Resources**

A comprehensive overview listing the threats, constraints etc. for each protected area has been given. A general introduction of Egypt's responsibility to preserve the biological diversity and cultural heritage should be stated, including international commitments. The paper should assess if the present system of protected areas adequately covers all ecosystems and the whole range of biodiversity in Egypt. The impact on and participation of local people in protected area management have to be addressed, as well as the importance of management plans and law enforcement. A stronger justification of environmental threats (air pollution, polluted ground water) on the cultural heritage is necessary. Preferably, the importance of natural heritage sites and protected areas in the national economy should be illustrated.

#### **Group 6: Coastal Zones and Marine Life**

We have not seen the first part of the report because of our shortcoming in the Arabic language! However, the table of content (in English) indicates that this part of the report addresses key questions. The status of all marine resources and their utilization and economic importance should be highlighted. Other pollutants than oil spill have to be elaborated upon. Influences of the water quality of the Nile on the brackish ecosystem and the important fisheries in the Delta have to be addressed. Monitoring systems and environmental impact assessments are also key elements in this paper, and international cooperative programs and treaties have to be addressed.

**Group 7: Solid Waste and Toxic Materials**

Good background data have been collected. Annex 1 has to be expanded and moved forward into the body of the report. An overview of the quantity and quality of different types of waste, treatments, discharge methods, and dumping regimes should be given. These pollution effects are related to those reported on by group 3 (Water Management), and duplication should be avoided. The economic consequences of solid waste pollution have to be addressed. The issue of toxic materials must be addressed in more detail. Recycling technology and secure disposal must be a central issue. Experience from the Zabaleen system seems to be quite relevant and needs to be elaborated upon.

**Group 8: Education, Cultural Institutions, Media**

The report consisted mainly of project proposals. More general background information about the educational system has to be presented, as was done during the oral presentation. Description on how ecology and conservation are incorporated in the educational system at all levels. Media have a pronounced influence and set the agenda for public awareness. Public relations are therefore a central issue to address. In the long run the educational system will play an essential role in raising public awareness on environmental issues. However, short term measurements also have to be taken in order to influence bureaucrats and decision-makers. Important to identify the target groups in PR campaigns. The Egyptian Environmental Information System (EEIS) has to be explained in more detail. The situation with respect to NGOs active in the field of conservation and their potential role need to be addressed. The role of the new Centre for Environment and Development for the Arab Region and Europe (CEDARE) should be discussed and included in this group report.

**Group 9: Management of Natural Resources**

The title of this group was misleading as it only dealt with institutional and legislative matters. Suggested new title: Institutional framework, legislation and policy regarding management of natural resources. It is crucial to include the question of environmental policy in this group paper, as well as the key question of intergovernmental functions. EEAs generic function and adaptive structure should be discussed, as the institutional framework of EEAA must probably be reshaped and substantially strengthened if it is to fulfill its coordinating and executive mandate.

The need for all Ministries to develop environmental action plans for their subsectors and the question of environmental law, implementation and enforcement are key questions to address in this most important paper. International commitments and their implications for Egypt's policy legislation (exa: Mediteranean Action Programme, MARPOL a.o.). Proposed

Law No 48 1992 ("Clean Water Act") needs to be explained in more detail. EEIS should rather be a integrated in group paper 8.

#### Group 10: Population Growth

An impressive amount of demographic data was presented. Health problems are not necessarily density dependent. Hence, a more analytical presentation is warranted. Probable impacts on land use and all natural resources from the predicted population growth were touched upon, but needs a much more comprehensive analysis. A more complete presentation of the Family Planning Programme and assessment of its relative success is needed. Also, population growth should not only be discussed as a technical question but be linked to the problems of social and economic development.

### 3. Framework of the Environmental Master Plan for Egypt

We enclose a tentative outline for the Master Plan. Its structure and composition follow the general pattern used in other national master plans, with elements adapted to what we believe is most appropriate for the situation in Egypt. Because of the urgent need to address the problems of pollution, we suggest the Plan be fashioned into a two-staged programme: an Action Plan for the immediate future and a longer-term management document where the main emphasis is given to linking environmental conservation to sustainable development.

The overall Plan may consist of six parts presented in two separate volumes. The Overview section (Part I) should be short and merely highlight national characteristics that are most relevant for environmental conservation in the country (i.e. the vital role of the Nile drainage system, spatial distribution of productive resources and human density, and overall assessment of the natural resource base). It should also give a short presentation of current institutional frameworks, legislation and policies and their performance.

Part II should contain more detailed information on the current status of the main natural resources and their production systems. Much of the data produced by the working groups will conveniently fit into this section.

Part III is the action-oriented part of the Master Plan. On the basis of an analysis and synthesis of the information presented in part II it should design appropriate actions needed to curb the most serious degrading processes on the Egyptian environment and dependent biological production systems. A separate volume (Part V, "Investment Programme" for implementing the Action Plan) should be annexed to this part of the Master Plan. This volume should contain abbreviated

versions of the project proposals with specified expenditures and a listing of priorities.

Part IV should describe the implications in terms of institutional development, legislation, staff and financial resources that are needed to implement the Action Plan. For easy reference, it would be useful if this part also contained a section of priority programmes.

Part V describes, in a separate Volume, the Investment Programme of the Action Plan (see above).

Part VI should elaborate on the Master Plan in a longer-term perspective and link environmental management to the general national strategy of economic and social development. Egypt's role and relationship to the global environment may also be included in this section.

In closing, we take this opportunity to thank our Egyptian hosts for having allowed us to contribute - although in a modest way - in the process of developing a Master Plan for the Environment. With the dedication and leadership expressed by the Cabinet Minister, H.E. Dr. Atef E. Ebeid, and the Environmental Affairs Agency, we are confident that this commendable effort will result in a product of high standard. Provided that the Plan will receive support at the highest political level, it will certainly have far-reaching consequences for improving the conservation and management of the environment and natural resource-based production systems in the country.

Thank you.

Per Wegge, NORAD Team leader  
Øystein Holand, NORAD Consultant

Enclosure: Suggested outline for Master Plan

Vedlegg 4

Suggested outline for:

## **ENVIRONMENTAL MASTER PLAN FOR EGYPT (EMPE)**

**Introduction**

**Fact sheet for Egypt**

**Maps**

### **Part I: Overview**

1. Status of land use and natural resources
  - i. Historical review
  - ii. Present status
  - iii. Population growth
2. Policies and institutional and legal framework
  - i. Past policies and performance
  - ii. Legal and institutional framework
  - iii. International treaties
  - iv. Decision-making and implementation
  - v. Economic and social development strategies
  - vi. Prospects and constraints

### **Part II: Major environmental issues - status report**

1. Management and conservation of natural resources
  - i. Energy
  - ii. Freshwater resources
  - iii. Coastal zone and marine resources
  - iv. Land and soil resources
  - v. Minerals
  - vi. Forests and vegetation
2. Biological production systems
  - i. Agriculture
  - ii. Rangeland management
  - iii. Freshwater fisheries and aquaculture
  - iv. Marine and estuarian fisheries
3. Cultural heritage and biodiversity conservation

4. Resource degradation
  - i. Water pollution
    - land based industry
    - offshore and oil discharge
    - agriculture
    - sewage
    - others
  - ii. Air pollution
    - industry
    - transportation
    - others
  - iii. Soil loss and erosion
    - agriculture
    - rural and urban development
    - others (river, wind, a.o.)
  - iv. Desertification

5. Human health

6. Interrelationships and linkages

**Examples:**

Population growth - rural development - land  
reclamation - afforestation - water conservation

Agricultural development - irrigation -  
water quality and quantity - freshwater fisheries &  
aquaculture

Industrial development - water pollution -  
human health

Water pollution - discharge to sea - estuaries -  
marine fisheries and marine resources

Consequences for intergovernmental cooperation,  
legislation and law enforcement

**International relationships:**

- Nile watershed - Ethiopia - Sudan - Egypt
- Red Sea navigation - oil pollution
- Nile discharge to Mediterranean Sea

7. Environmental education and public awareness

**Part III: Environmental Action Plan for the 1990s**

1. Overall policy and objectives
2. Guidelines for:
  - i. Natural resources
    - Energy
    - Freshwater
    - Coastal zone and marine resources
    - Land and soil resources
    - Minerals
    - Forests and vegetation
  - ii. Biological production systems
    - Agriculture
    - Rangeland management
    - Freshwater fisheries and aquaculture
    - Marine and estuarian fisheries
3. Pollution control
  - water
  - air
4. Population growth
5. Cultural heritage and biodiversity conservation
6. Public education and awareness
7. Monitoring and environmental impact assessment (EIA)

**Part IV: Implications of Action Plan**

1. Institutional development  
(central and local levels)
2. Legislation
3. Staff requirements
4. Financial resources
5. Priority action programmes
6. International cooperation

**Part V: Investment programme for the Action Plan**

Project briefs with priorities and expenditures presented in separate Volume 2.

**Part VI: Sustainable development**

1. Development strategies and conservation of natural resources - scenarios
2. Long term planning and allocation of resources
3. Financial incentives and disincentives
4. Environmental technology - adaptive to Egypt
5. Egypt and the global environment

Per Wegge

Øystein Holand

Cairo, October 1991

Vedlegg 5

LISTE OVER DELTAKERE

Minister for Cabinet Affairs and Minister of State for Administrative Development:

Minister Atef Ebeid  
Rådgiver Hisham El Sherif

Egypt Environmental Affairs Agency (EEAA):

Direktør Salah Hafez  
Rådgiver Tarek Genena

Information and Decision Support Center (IDSC):

Direktør Effat El Shookey  
Rådgiver Amin Lotfy

Friedrich Ebert Stiftung (sponsor av møtet):

Rådgiver Khaled Fahmy

Verdensbanken:

Leder Anand Seth  
Rådgiver Sherif Arif  
Rådgiver Tray Sinha  
Rådgiver Mario Zolaya

DANIDA:

Rådgiver Søren Wium-Andersen  
Attache Hans Hessel-Andersen

