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PROGRESS MADE IN THE IMPLEMENTATION OF THE WORK PROGRAMME

URBAN ENVIRONMENTAL MANAGEMENT IN SELECTED COUNTRIES
OF THE ESCWA REGION

Note by the Secretariat
Introduction

1. The countries of Western Asia are confronting all manner of critical problems as a direct result of rapid and erratic urban growth. In this respect the question of environmental management is proving one of the most difficult in the development of their urban communities. This is reflected not only in shortages of basic services and utilities, such as drinking water, sewerage, communications and educational facilities but also in deteriorating housing conditions, unsatisfactory health services and a steady rise in levels of environmental pollution caused by industrial, agricultural and physical development.

2. The scarcity of financial resources has impelled the governments to channel whatever capital is available for investment in productive ventures to increase their domestic product, achieve long-term goals and ultimately improve the social and economic lot of the population. In this process, however, insufficient attention is being devoted to projects in the services sector related to the environment and the improvement of living conditions in urban communities.

3. In view of the deteriorating quality of the environment in many large cities in the ESCWA region, planning strategy must provide for the incorporation of environmental elements in every single development programme if a desirable form of integrated economic and social progress is to be achieved, namely, one combining both the protection of the environment and the improvement of living conditions.

4. The United Nations Economic and Social Commission for Western Asia (ESCWA) and the French Government are implementing a joint project with a view to investigating suitable means of improving environmental management in the main cities of the region.

5. The cities of Alexandria, in the Arab Republic of Egypt, and Amman, in the Hashemite Kingdom of Jordan, have been selected for the initial stage of the project. Alexandria provides a good example of a coastal city on the Mediterranean, whereas Amman is a typical landlocked urban centre. Both cities have been, and still are, experiencing rapid spatial and demographic growth of unforeseen proportions. The project will be expanded during 1986 to include the problems of other cities of the region, such as Sana'a in the Yemen Arab Republic and Manama in Bahrain.

Basic elements for study

6. The problems of the selected cities are tackled on the basis of preliminary studies on the status of their respective environmental conditions and existing management capabilities. These may cover the following areas:
(a) **Management**

Evaluation of the structure of administration and the delegation of responsibility within the local authority in general, and among the various bodies specialized in environmental management in particular.

(b) **Legislation**

The study of both laws, regulations and instructions governing environmental management and pollution control and the extent of their effectiveness as basic tools for the protection and improvement of the environment.

(c) **Drinking water**

Treatment and distribution techniques; sources of pollution in main networks; methods of inspection; percentage of users; and future plans for expanding networks.

(d) **Sewerage**

Adequacy of networks and sewage works; impact of industrial pollution; satisfaction of requirements in maintenance personnel; proportion of users; and plans to use sewage water in irrigation and land reclamation projects.

(e) **Solid waste**

Evaluation of means available to collect, store, transport, sort and recycle waste; garbage disposal methods and techniques employed in the treatment of solid industrial waste and in the disposal of dangerous substances.

(f) **Atmospheric pollution**

Sources and nature of pollutants; impact of pollutants on public health and the environment; and methods used to control atmospheric pollution.

(g) **Environmental salubrity**

Adequacy of sanitary and prophylactic services; environmental epidemiology studies; and evaluation of means used to control pollution and vermin.

(h) **Urban planning and housing**

Study of city master plans, with special emphasis on planning for spatial expansion; programmes for increasing housing capacity; maintenance and renovation of existing housing; applicability of laws and legislation on housing; utilization of land for housing; and the extent of urban encroachment on surrounding agricultural land.
(i) Occupational health

Control of natural, biological and chemical factors affecting the working environment; and study of laws and regulations governing occupational health.

(j) Transport and communications

Adequacy of transport of public transport and problems caused by increasing traffic in crowded residential and/or industrial areas.

(k) Alimentary salubrity

Control of food production and distribution; processes and methods used to control food imports.

(l) Preservation of the national heritage

Maintenance of historical monuments and protection of places of scenic and aesthetic value.

(m) Entertainment

Sufficiency of open areas, promenades and public gardens, as well as plans for their expansion.

(n) Nuclear energy (where applicable)

Programmes for protection from radiation; for monitoring of environmental impact; and plans for controlling the thermal pollution of cooling water.

Plan of action

7. Through the study of the basic elements of environmental management, obstacles, impediments and weaknesses directly or indirectly affecting the proper implementation, monitoring and management of environmental programmes are identified. Following the selection of specific areas of priority in the principal areas of environmental management in the city under consideration, a work programme is prepared on the basis of both the study itself and experience in urban environmental management acquired around the world in general and in France in particular.

8. The choice of the work programme is based on the evaluation of the following:

- First, Environmental management programmes: (drinking water, sewerage; garbage; housing; transport; promotion of environmental awareness and legislation).
- Secondly, Impact: (sanitary; economic; social; environmental planning; aesthetics; etc...).

- Thirdly, Means of improvement: (review of plans; exchanges of experience; training; recommendations for new guidelines and amendment of existing regulations; environmental evaluation studies).

9. The implementation of a programme to improve environmental management presupposes full co-operation between government agencies and the local authorities concerned. Moreover, these must endeavour to enhance the effectiveness of co-ordination and avoid conflicting overlaps in the spheres of competence of the executive bodies responsible for environmental projects.

10. Lastly, an environmental management communications centre could be set up within the local administration to supervise the realization of the study and the co-ordination of plans of action.

11. In order to ensure the effectiveness of the project, each city selected for study in the ESCWA region will be associated with a city of reference facing comparable conditions and problems in terms of size, geographic location and rate of growth. Accordingly, the French cities of Marseille and Bordeaux have been selected as references for Alexandria and Amman, respectively.

Project implementation

12. The joint project envisaged that after the submission by the working team of its preliminary report, senior officials from the two cities would undertake a study visit to the respective counterpart city in France; in other words, administrative staff from Alexandria would visit Marseille and those from Amman would make a similar trip to Bordeaux.

13. On the basis of the report of the working team and the missions of local administrative staff, a workshop would be organized for each of the two cities to discuss a programme of action for the improvement of environmental management. The participants of the workshops would consist of local administrative staff, government officials, international experts (working team) and representatives of relevant United Nations organs as well as regional and international bodies concerned with environmental management; the final report, which would include an action plan and the implementation programme for the improvement of environmental management: would then be formulated on the basis of the discussions and recommendations of the workshops.

14. The final step would be the mobilization of resources and the commencement of the implementation of the integrated programme of environmental management.

15. Within the framework described above, joint ESCWA/France missions visited Alexandria and Amman in December 1984 and May 1985, respectively as described below.
Development of environmental management in Alexandria\(^1\)

16. A team of experts visited Alexandria, Egypt, from 24 November 1984 to 10 December 1984 with the following terms of reference:

**Objectives**

17. The objectives of the mission were:

- To assess the existing environmental conditions in the Alexandria Governorate;

- To evaluate the administrative and management structures and procedures, including legislation related to matters of environmental concern, such as drinking water, sewerage, solid waste, atmospheric pollution and urban development;

- To discuss with the local authorities concerned various problems and constraints and identify ways and means of improving the management situation;

- To propose a preliminary action plan that would lead to better planning, implementation, monitoring and management of environmental programmes.

**Activities**

18. The mission met and held intensive discussions with the concerned officials and personalities in the governorate and made on-site visits to the various parts of the city where activities with environmental impact were being carried out.

**The report**

19. Based on discussions with officials concerned, examination of official documents, including the Comprehensive Master Plan of Alexandria to the Year 2005, and observations from in-the-field experience, the joint mission prepared its preliminary report for the consideration of the concerned government authorities. The report encompasses two parts.

20. The first part includes two sections. The first section constitutes a brief presentation of the scope and pattern of the priority environmental problems in Alexandria and assessment of organizational functions and structures of existing environmental institutions. The second section encompasses the main proposal of the mission which relates to the development of an institutional set-up for environmental monitoring and management in the

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1/ For more details see Strengthening Environmental Management in the ECWA Region - Development of Environmental Management in Alexandria (E/ECWA/RS/85/1, E/ECWA/ECU/85/5) 6 August 1985.
Alexandria metropolitan area. The objectives, functions and structural components of the set-up are given in some detail; an outline of evaluation forms for waste treatment facilities is attached in annex I to the report.

21. The second part of the report consists of a brief review of the Comprehensive Master Plan of Alexandria to the Year 2005 and highlights some urban environmental problems that need special attention with a view to enhancing and maintaining at a high level the visual appearance and the other aesthetic aspects of the city. With respect to the Master Plan proposals for the development of new economical and low-cost housing schemes and the relocation of some existing residential quarters to new areas, the report recommends implementing some of these proposals as pilot projects which would incorporate sound socio-economic, physical and environmental planning principles with appropriate architectural design. Apart from accommodating people, the pilot project should also provide opportunities for on-the-job training for local planners, architects, builders and managers of urban or peri-urban settlements. Moreover, the pilot project(s) may become subjects for regional and interregional seminars and workshops.

22. The preliminary report was submitted to the Governorate of Alexandria and to the French Government in September 1985 and it is expected that the visit to France of a team of top-ranking administrators from Alexandria will be made without further delay.

Environmental management scheme for Amman, Jordan

23. Within the framework of the joint project a team of experts visited the city of Amman from 8 to 19 May 1985 with the following terms of reference:

Objectives

24. The objectives of the mission were:

- To assess the existing environmental conditions in Greater Amman;

- To evaluate the administrative and management structures and procedures, including legislation related to matters of environmental concern, such as drinking water, sewerage, solid waste, atmospheric pollution, urban development, etc.;

- To discuss with the local authorities concerned the various problems and constraints and identify ways and means of improving the management situation;

- To propose a preliminary action plan that would lead to better planning, implementation, monitoring and management of environmental programmes.

1/ For further details see Strengthening Urban Environmental Management in the ESCWA Region, Environment Management Scheme for Amman, Jordan, Preliminary report of the Joint ESCWA/France Mission to Amman from 8 to 19 May 1985, (E/ESCWA/HS/85/2, E/ESCWA/ECU/85/6).
Activities

25. The mission met and held intensive discussions with the officials concerned in the Greater Amman Area and visits were made to the various parts of the city where activities having an environmental impact were being carried out.

The report

26. Based on discussions with officials concerned and examination of official documents as well as field observations, the joint mission prepared the preliminary report for the consideration of the concerned government authorities. The report encompasses two parts.

27. Part one consists of two sections. The first section constitutes a brief presentation of the scope and pattern of the priority environmental problems in the Greater Amman area and an assessment of organizational functions and structures of existing environmental institutions. The second section encompasses the main proposal of the mission, which relates to the development of an institutional set-up for environmental monitoring and management in Greater Amman. The objectives, functions and structural components of the set-up are given in some detail; an outline of evaluation forms for waste treatment facilities is attached in annex I to the report.

28. Part two of the report is a brief overview of the urban and regional development activities in Greater Amman, with emphasis on environmental aspects of low-income group settlements that merit special attention. The report includes proposals for utilizing solar energy for domestic water heating in future urban development projects and for initiating a pilot project for the investigation of thermal performance of an existing low-cost housing scheme in order to evaluate consequences of design on thermal behaviour, to propose alternative architectural designs for rectification and/or rehabilitation of existing schemes and to prepare guidelines for adoption at the Greater Amman regional level. Moreover, the pilot project may become the subject of local, regional and interregional training seminars and workshops for planners, architects and managers of urban and peri-urban settlements.

29. The preliminary report was submitted to the authorities concerned in Amman and France in January 1986. Follow-up action will be taken as soon as their reactions are received.