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THE PRIORITY ACTIONS PROGRAMME OF THE
MEDITERRANEAN ACTION PLAN
PROGRESS REPORT AND PROPOSED ACTIVITIES
for 1981 - 1983

Prepared by

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Annex: Information on PAP/RAC

1. INTRODUCTION

1. The Priority Actions Programme (PAP) was approved by the Intergovernmental Meeting of Mediterranean Coastal States, Split, Yugoslavia, 31 January - 4 February 1977. It has been conceived as one of the major elements of the environmental management component of the Mediterranean Action Plan. The main objective of the PAP is the initiation of co-operative activities by the coastal States of the Mediterranean region with respect to appropriate environmental management practices on the basis of available knowledge in selected priority action areas. Thus, all activities undertaken under PAP seek to demonstrate, through practical actions, alternatives for environmentally sound socio-economic development. The Split intergovernmental meeting recommended that, wherever possible, activities of the PAP should include a training component and assist in the transfer of appropriate technology. Furthermore, it recommended that training activities should, as far as possible, make use of the existing national institutions in each country.
2. The Split meeting identified six PAP fields where immediate action was required: renewable sources of energy, marine living resources including management of fisheries and aquaculture, human settlements, management of water resources, tourism and protection of soil.
3. The overall co-ordination of the PAP-related activities was carried out by UNEP as the organization having been entrusted with the secretariat functions of the Mediterranean Action Plan. More specifically, this task was discharged by UNEP's Regional Seas Programme Activity Centre (until February 1981) and by the unit co-ordinating the Mediterranean Action Plan (since February 1980).
4. In 1978 an agreement was reached between UNDP and UNEP to establish in Geneva a joint unit to provide a strong programming input to PAP-related activities which are of interest to both of these organizations.
5. In 1976, pursuant to the decision of the intergovernmental meeting in Split (1977) and to the decisions subsequent to the intergovernmental meeting which reviewed the PAP activities, the Town Planning Institute of Dalmatia, Split, Yugoslavia, assumed the role of the Regional Activity Centre for PAP with the task of assisting the secretariat (UNEP) in the implementation of selected PAP-related activities.

6. A large number of bodies and specialized organizations of the United Nations system (UNCHS (HABITAT), ILO, FAO, UNESCO, WHO, IMCO) have been involved in the preparation and implementation of the various PAP activities.
7. The purpose of this report is to review the progress achieved in the implementation of the approved PAP by PAP/RAC, and its involvement therein, and to propose some new fields for co-operative work in other activity sectors by Mediterranean coastal States.

II. PROGRESS REPORT ON APPROVED PAP ACTIVITIES AND PROPOSED FOLLOW-UP ACTIVITIES

A. HUMAN SETTLEMENTS

8. A project (FP/NE/C104-80-G1(2155)) was initiated by UNEP in 1979 to:
 - identify problems in coastal human settlements requiring urgent regional co-operation;
 - classify those problems according to (i) their magnitude and distribution throughout the region and (ii) their suitability for quick action for their improvement;
 - investigate the feasibility of bringing about improvement based on the exchange of acquired knowledge, experience, technology and methods;
 - advise on the development of any pilot project(s) requiring urgent regional co-operation;
 - identify research, training and environmental monitoring activities related to the problems of human settlements in the region;
 - define the need for assistance to the Governments of the region in the field of human settlements; and
 - contribute to the formulation of a co-operative programme for solving problems identified as priority areas in human settlements.
9. The project is carried out by PAP/RAC in collaboration with WHO and under the guidance and supervision of UNEP and the joint UNDP/UNEP unit.

10. As part of the project activities:

- three countries (Spain, Tunisia and Greece) have been visited to discuss problems related to human settlements;
- position papers have been prepared on:
 - (a) common conditions and problems concerning Mediterranean Coastal States;
 - (b) proposals for regional co-operation in the field of Mediterranean Coastal Human Settlements;
- the Government Expert Meeting on Mediterranean Coastal Human Settlements was convened in Split (Yugoslavia) on 22-24 September 1980. Experts from 10 Mediterranean countries and the representatives of UNEP, HABITAT, UNDP, WHO, BP/RAC participated in the meeting.

11. The meeting reviewed the problems of Mediterranean human settlements and recommended the following components for a PAP project on human settlement (Ref UNEP/IG.23/INF.23):

- the impact of migration on human settlements; problems of hygiene, and communicable diseases;
- regional, town and land-use planning; urban and periurban transport, sea transport and special problems of small communities and islands;
- communal facilities and services; new and appropriate technologies;
- rehabilitation of historic centres and protection of man-made and natural sites.

12. In addition, the meeting recommended the establishment of a system for collection, evaluation and dissemination of information, and a training programme for managers and specialists in the field of human settlements.

13. PAP/RAC has already contacted the appropriate United Nations agencies and asked them to formulate individual elements of a regional programme in the four above-mentioned areas.

14. Two proposals were received from WHO:
- (i) appropriate technology for liquid and solid waste collections and disposal in Mediterranean medium-scale settlements;
 - (ii) comprehensive environmental planning in the Mediterranean Metropolitan Area.

Appropriate technology for liquid and solid waste collection
disposal in Mediterranean medium-scale settlements

Activities

15. The technical documents listed under 'Outputs' will be prepared by specialized collaborating institutions in the Mediterranean countries. The draft technical documents will be reviewed by a working group of experts from the collaborating Governments who will contribute with their national experience on the technical subjects included in the project.
16. At the end of the project a multi-lingual seminar will be convened to disseminate the conclusions and recommendations of this project. Thus, the proposed list of activities will be as follows:
- 1) A working group to discuss points (a), (b) and (c) listed under 'Outputs' on the basis of three consultant studies prepared on each of the subjects by three specialized consultants (problem identification).
 - 2) A working group to review the two technical documents concerning subjects (d) and (g) listed under 'Outputs'; these technical documents will be prepared under a sub-contract by a specialized institution, the Sanitary Engineering Department of Athens University (Greece) (non-sewered sanitation).
 - 3) A working group to review the two technical documents concerning subjects (e) and (f) listed under 'Outputs'; these technical documents will be prepared under a sub-contract by a specialized institution, the Sanitary Engineering Department of Zagreb University (Yugoslavia) (sewer networks).
 - 4) A working group to review the two technical documents concerning subjects (h) and (k) listed under 'Outputs'; these technical documents will be prepared under a sub-contract by a specialized institution, the Sanitary Engineering Department of the Naples University (Italy) (solid wastes).

- 5) A working group to review the two technical documents concerning subjects (i) and (j) listed under 'Outputs'; these technical documents will be prepared under a sub-contract by a specialized institution, the Sanitary Engineering Department of the Barcelona University (Spain) (wastewater treatment).
- 6) A working group to review the technical document concerning subject (l) listed under 'Outputs', to be prepared under a sub-contract by a specialized institution, the Sanitary Engineering Department of the Alexandria University (Egypt) (manpower development).
- 7) A working group to review the three technical documents concerning subjects (m), (n) and (o) listed under 'Outputs'; these technical documents will be prepared under a sub-contract by two specialized agencies, the CTGREF and the CEFIGRE (France) (management).
- 8) An international seminar to disseminate the conclusions of the whole project as issued by the seven working groups proposed. Participants from all the participating Governments will attend the seminar. The seminar proceedings as well as the working group reports and all studies and technical documents will be translated and published in the four official languages of the Mediterranean programme.

Outputs

17. This project will produce detailed reports and recommendations on the following subjects related to basic sanitation in middle-scale Mediterranean settlements:
 - (a) Health impact of poor basic sanitation in the Mediterranean area;
 - (b) Environmental impact of poor basic sanitation along the Mediterranean coast;
 - (c) Problems related to the improvement of basic sanitation conditions in Mediterranean middle-scale settlements;
 - (d) Comprehensive criteria to choose between sewered and non-sewered sanitation facilities;
 - (e) Design criteria and appropriate technology for sewer networks, considering construction, operation and maintenance, re-use of treated wastewater and impact of storm water drainage problems;

- (f) Design criteria and appropriate technology for storm water drainage facilities, considering construction, use of local resources, maintenance and impact of liquid wastes collection problems;
- (g) Design criteria and appropriate technology for individual sanitation systems, with due consideration given to sludge removal and disposal facilities needed, as well as to unconfined aquifer pollution control.
- (h) Design criteria and appropriate technology for the collection and transportation of garbage from domestic homes or municipal street cleaning activities to the garbage disposal facilities;
- (i) Appropriate technology for liquid wastes treatment in middle-scale settlements with special attention to processes such as lagooning, land application and sand dune infiltration;
- (j) Possibility of treated wastewater and/or storm water recovery and re-use. Impact on sewer network design;
- (k) Appropriate technology for garbage treatment and disposal with special attention to processes such as composting or sanitary land-filling;
- (l) Manpower development problems for basic sanitation services in middle-scale settlements, with special consideration given to training of multi-purpose operators;
- (m) Regionalization of basic sanitation services by grouping of middle-scale settlements, optimal size to justify each kind of waste disposal facilities;
- (n) Management principles of basic sanitation agencies in middle-scale communities, isolated or grouped on a sound regional basis;
- (o) Cost benefit of basic sanitation projects and financial procedures to support basic sanitation facilities, construction, operation and management in middle-scale settlements.

(NB: All these reports will be translated into the four working languages of the MED programme, i.e. Arabic, English, French and Spanish).

Duration of the project: 36 months.

Comprehensive environmental planning in the Mediterranean Metropolitan Area

Activities

- 18.
- 1) Several working groups of Mediterranean experts will review the technical reports issuing from the Athens project and covering part of the subjects listed under point (1) in 'Outputs'.
 - 2) A few working groups of international and Mediterranean experts will discuss the technical subjects listed under point (1) of 'Outputs' which were not sufficiently covered during the implementation of the Athens project.
 - 3) A trilingual seminar on comprehensive environmental planning in the Mediterranean area will be organized.
 - 4) Study tours will be organized for Mediterranean experts from other countries to visit the Athens project.
 - 5) In a second phase of this project, and as a follow-up to the present activities, ad hoc assistance may be provided to other Mediterranean large-scale human settlements which may wish to develop projects similar to the Athens project.
 - 6) The project technical reports and outputs will be translated, edited, reproduced and distributed in the four official languages of the Mediterranean programme.

Outputs

- 19.
- 1) This project will produce detailed reports and recommendations on specific technical subjects related to environmental protection in major Mediterranean human settlements, such as:
 - (a) Comprehensive environmental planning and implementation in Mediterranean metropolitan areas;
 - (b) Environmental health monitoring in metropolitan areas;
 - (c) Water supply and sewerage planning in metropolitan areas;
 - (d) Air pollution control;
 - (e) Noise control;

- (f) Urban and industrial solid wastes management;
 - (g) Coastal pollution control;
 - (h) Industrial pollution abatement;
 - (i) Food hygiene;
 - (j) Housing hygiene;
 - (k) Transport safety;
 - (l) Toxic chemicals and radiation monitoring;
 - (m) Environmental impact assessment for new development projects;
 - (n) Large-scale wastewater treatment plants and final disposal of their effluents;
 - (o) Zoonotic control in urban areas;
 - (p) Organization, management and financing of metropolitan environmental monitoring, planning, and implementing agencies.
- 2) This project will train Mediterranean countries' experts in comprehensive environmental health planning techniques.
- 3) It will adapt the conclusions of the Athens experience to the case of other Mediterranean metropolitan areas.
- 4) It will serve to help other Mediterranean countries in solving environmental problems in their metropolitan areas and in building efficient environmental agencies.

Duration of project: 24 months.

Rehabilitation and renewal of small and historic coastal
settlements

- 2L. The PAP/RAC itself has already developed a proposal on rehabilitation of small coastal settlements.

Activities

- 1) Analysis and evaluation of existing situation.
- 2) Determination of development factors.
- 3) Development of restoration plan.
- 4) Seminars and training courses.

Outputs

- 1) Revitalization plan with needed bye-laws and financial survey.
- 2) Guidelines for the rehabilitation and renewal of small and historic coastal settlements.
- 3) Final report

Duration of the project: 12 months.

21. The report of the meeting at Split contains in annex IV a number of useful suggestions for possible pilot projects including the expression of interest by individual countries in specific activities. Among them PAP/RAC believes that at least four may be suitable for early project formulation.
 - restoration of historic centres (Medina);
 - planning of development for the coastal zone;
 - impact of hinterland to coast migration and possibilities of reducing the pressure on the coastal areas;
 - development of harbours and sea transport.
22. PAP/RAC is in contact with the appropriate United Nations agencies in order to formulate project proposals. While this initial programming work is being undertaken, the following tentative budget for human settlements has

been established (in US \$):

	1981		1982		1983	
	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC
Co-ordination and synthesis	35,000	50,000	20,000	45,000	157,800	50,000
Implementation of pilot projects (6-7)	125,000		300,000		300,000	
TOTAL	160,000	50,000	320,000	45,000	457,800	50,000

23. For the implementation of the pilot projects it will be necessary to have additional inputs of about US \$ 1,000,000.
 24. After the completion of proposed and expected pilot projects, a final (synthesis) report will be prepared and discussed at the Government Expert Meeting.
 25. The final report should summarize solutions and recommendations given by the pilot projects report, and should be prepared as a manual containing recommendations and guidelines for the environmentally sound-planning and
8. TOURISM
26. On the basis of the recommendations made by the Intergovernmental Meetings (1977, 1978, 1979 and 1980), and following recent experiences in other priority actions, a consultation of experts from three Mediterranean countries, UNEP, UNDP/UNEP Co-ordination Unit, WTO and PAP/RAC was convened in Geneva on 13-14 November 1980. Two papers submitted by WTO and PAP/RAC were the background for a discussion on the possible development of priority action on tourism.
 27. The meeting defined several components of a Mediterranean regional programme on tourism grouped in the following five categories:
 - saturation in time and space;
 - positive and negative effects of tourism;

- carrying capacity of particular areas;
- integrated planning in tourism;
- strategy for optimal policy in tourism.

PAP/RAC and WTC are preparing material for the initial preparatory phase.

Duration of project: 24 months

Tentative budget (in US \$)

	1981		1982		1983	
	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC
Co-ordination and synthesis	100,600	50,000	24,000	45,000	112,200	50,000
Implementation of pilot projects (4)			347,000		200,000	
TOTAL	100,600	50,000	371,000	45,000	312,200	50,000

28. For the implementation of the Pilot Project it will be necessary to have additional inputs of about US \$ 650,000.

C. WATER RESOURCES MANAGEMENT

29. At the instigation of UNEP and the UNDP/UNEP co-ordination unit, the activities concerning water resources management, which had been initiated earlier, continued with the interagency consultation meeting in Paris on 7 - 10 July 1980.
30. The meeting developed a list of projects which should be regarded as an integrated package. Individual components within the package could be worked up and operated separately but the total delivery effort should take account of the basic homogeneity of the programme. This internal coherence would be assured in particular by the proposed supporting activities, namely transfer and exchange of technology and information, as well as by extensive training programmes.
31. Twelve projects were developed, and are under consideration by UNDP for financing.

32. The following is being prepared by PAP/RAC:

Sea transport of fresh water

Objectives

33. The long term objective of the project is to help interested Governments of Mediterranean States in solving the problems of sea transport of fresh water to the islands and to other areas lacking water.
34. The immediate objective of the project is to analyse existing modes of sea transport of water; to collect and review all relevant data and to provide interested Governments with the necessary elements for planning the most appropriate ways of transporting water by sea.

Background

35. All Mediterranean islands lack fresh water of acceptable quality. The majority of the islands are small. The shortage of fresh water imposes constraints on economic and social development of islands, and indirectly leads to extensive migration of local populations.
36. Most islands have a favourable climate which is a good basis for the development of both tourism and agriculture. However, these economic activities are heavy consumers of water in the summer season, the driest period of the year.
37. In order to satisfy needs for fresh water on the islands and in arid coastal areas, water is transported by sea from the nearest area which has enough water of adequate quality.

Activities

38. Information on existing and planned modes of sea transport of fresh water in the Mediterranean will be collected and processed. Also, existing knowledge and experience will be exchanged between interested Mediterranean Governments on the various modes of sea transport applied; elements will be determined for comparative analyses of each separate mode of water transport; and their advantages/ disadvantages will be confronted with those of desalination.

Outputs

39. The final report will contain:
- relevant information and recommendations on the solution of problems pertaining to sea transport of fresh water to the islands and arid coastal areas;

- elements for the comparative analysis of possible ways of transporting water by sea; and
- conditions to be met for choosing one of the ways of sea transport of water.

Duration of project: ten months.

Tentative budget (in US \$)

	1982	
	MTF UNEP	PAP/RAC
Co-ordination and execution	72,000	36,500

D. RENEWABLE SOURCES OF ENERGY

- 40. The joint UNDP/UNEP programme unit in Geneva followed up the work of the meeting of Government experts in Malta in 1976 with a series of fact-finding missions to Mediterranean countries. UNDP subsequently financed a preparatory assistance project at a cost of \$200,000 which has resulted in the formulation of a large-scale regional programme on renewable sources of energy at an estimated cost of \$6.75 million. The main components will concern testing and demonstration of equipment linked to the generation of electricity by wind power, water pumping using energy generated by photovoltaic conversion, and desalination of sea-water and inland brackish water. Supplementary studies have been identified in an economic and financial analysis of the systems under test conditions, environmental impact assessment and consumer adaptation tests. A substantial training component involving seminars and workshops has also been built into the proposed project.
- 41. UNDP is currently reviewing this programme in order to decide upon its possible financing from regional funds, and from other funding sources which may become available.

E. AQUACULTURE

- 42. A joint UNDP/FAO/UNEP mission conducted from October 1976 - May 1979 as, preparatory assistance, resulted in the identification of a large-scale regional project in aquaculture. The cost of the preparatory exercise has been \$245,000 including the estimated cost of a Project Co-ordinator who was recruited for one year from mid-June 1980. The Project Co-ordinator has undertaken a round of technical visits to coastal States in order to

secure their detailed reaction to the proposals contained in the project document. The total cost of the project is estimated at \$2.48 million.

43. UNDP has formally submitted the draft project document to Governments for review, and for formal expression of support if Governments so decide. UNDP is at present assessing the extent of firm support from Governments prior to any decision on financing the project as a whole.

F. SOIL PROTECTION

44. The Intergovernmental meeting held in Split in 1977 asked for the initiation of a priority action on soil protection, which was confirmed at meetings in 1979: in Geneva and in 1980 in Barcelona.
45. UNDP has carefully reviewed the proposals received from FAO and the advice obtained from other sources. It has decided that it would not be justified in financing project activities of a regional character in this sector, and has made this position known to UNEP and FAO. PAP/RAC nevertheless feels that one further effort should be made and proposes the following:

Objectives

46. Long-term objectives - To identify and recommend the methods and measures which would encourage a better use of soil in Mediterranean countries through the alleviation of negative by-effects of development and rational utilization of natural potentials.
47. Short-term objectives - to identify the method and measures which would provide: prevention of soil degradation caused by desertification, karstification, and erosion; protection against soil degradation caused by human activity; reuse of abandoned agricultural areas and areas destroyed by large forest fires; optimal use of soil.

Background

48. Ever-increasing production of material goods in all Mediterranean countries has necessitated an excessive use of areas for human settlements, industries, communication systems and infrastructure facilities. In particular areas this has resulted in a substantial decrease of fertile agricultural areas and woodlands and, consequently, in disturbed ecosystems, vegetation cover, hydrology, landscape, etc. On the other hand, intensive utilization and exploitation of high-quality agricultural areas and woodlands have stimulated erosion processes that directly imperil water resources, communication systems and settlements, disturbing the balance and stability of the environment.
49. Unplanned and uncontrolled utilization of land for agricultural production

has stimulated erosion processes in watersheds and accelerated the washing away of the most fertile top soil which has in turn (as river talus) choked up the watercourses and basins making agricultural areas unfit for cultivation and reducing their capacity for food production.

50. The more extensive use of chemicals and biochemicals in agriculture, industries and settlements, increasing their concentrations in soil, rivers, streams, lakes and the sea, negatively affect the biological balance and the quality of the environment.
51. All human activities, most of all the utilization of soil for agricultural production, are conditioned by adequate water supply. The provision of development plans related to water resources and multipurpose water supply systems is therefore of considerable importance. Water resources management should also take into consideration the problems of karstification and desertification of affected areas.

Activities

52. The action will be carried out in two phases:
- identification of problems which may be considered as elements for pilot project(s), and of types of areas which may be used as pilot areas;
 - pilot projects for the problems identified in the first phase, which have to provide solutions to these problems, and training of professionals and managers in the field of soil protection and management.

Identification of Problems

53. PAP/RAC, in consultation with national PAP Focal Points and the relevant specialized parts of the United Nations system, in particular FAO, will prepare a draft project document for regional co-operation on problems related to soil protection. This draft document will be submitted to a government expert meeting. The meeting will be called to:
- advise on the feasibility of the proposed co-operative project;
 - identify pilot areas in which the project would be carried out;
 - advise on the institutional and financial arrangements needed for the implementation of the project.

Areas of Activities

54. 1. Prevention against soil degradation caused by:
desertification, karstification and erosion.

- Karstification:

subsoil (vertical) erosion; typical karst phenomena; subsoil water circulation and its utilization for the improvement of soil productivity.

- Desertification:

impact of climate; wind erosion; regeneration of soil; and reclamation.

- Erosion:

erosion of agricultural areas and woodland; choking-up of streams, rivers and water supply systems.

2. Protection against soil degradation caused by human activity:

- expansion of settlements and industries;
- exploitation of soil;
- arable areas and woodlands used for other purposes;
- production of industries and their waste disposal;
- consequences resulting from the use of biochemicals.

3. Re-use of abandoned agricultural areas:

- soil management including preservation of ecosystems and protection of landscape;
- regeneration of soil and vegetation.
- improvement of agricultural production and forestry through application of new technologies.

4. Re-use of areas destroyed by fire:

- regeneration of soil and vegetation.

5. Determination of conditions for optimal use of soil.

Duration of preparatory phase: 12 months.

Expected duration of total project: 36 months

55. Tentative budget (in US \$)

	1981		1982		1983	
	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC
Co-ordination and execution of the first phase	99,400	35,000				
Pilot projects (4-5)			250,000		200,000	
Co-ordination and synthesis of further phases			40,000	25,000	200,800	25,000
TOTAL	99,400	35,000	290,000	25,000	400,800	25,000

For the implementation of the pilot project it will be necessary to have an additional input of about US \$ 1,000,000.

III. PROPOSALS FOR NEW PAP ACTIVITIES

A. SURVEY OF NATIONAL CAPABILITIES AND MEANS TO RESPOND TO ENVIRONMENTAL PROBLEMS INCLUDING SCIENTIFIC AND ADMINISTRATIVE INSTITUTIONS, MANPOWER, RESEARCH FACILITIES AND EQUIPMENT

Objectives

56. To publish in the form of directories, surveys of the national institutional capabilities and needs of the Region for the implementation of each PAP project.
- To survey the manpower capabilities and needs related to PAP projects.
 - To identify national and subregional institutions which can form networks for the implementation of each PAP project with the Mediterranean Action Plan.

Background

57. The concrete results of the Mediterranean Action Plan depend on action at regional, subregional and national levels. National institutions designated by their Governments provide the institutional basis for the activities, agreed upon between the Governments, as components of the

Mediterranean Action Plan.

58. In principle, each of the activities agreed to as part of the Mediterranean Action Plan is carried out by several national (as well as subregional and regional) institutions located in the countries of the Region, linked in networks of co-operating institutions.
59. It is therefore important to identify and develop appropriate institutional capabilities and co-ordinating mechanisms at those levels.

Activities

60. Using the information expected to be received from national PAP focal points for each of the accepted PAP projects, lists of national and subregional institutions in the Region will be prepared and printed as directories, information on the research facilities, equipment, manpower and ongoing and planned activities related to the PAP.

Outputs

61. First Phase: Preparation of comprehensive lists of:

- scientific and administrative institutions;
- research facilities and equipment;
- ongoing and planned activities dealing with environmental processes, with an assessment of the capabilities of these institutions and facilities;
- preliminary indication of the role they can play in the implementation of the Mediterranean Action Plan;

Second Phase: Printing and periodic updating, as necessary, of:

- directories including detailed information about the scientific and administrative institutions of the Region, including facilities, manpower, ongoing and planned activities of these centres;
- a review of regional manpower capabilities and needs.

Duration of project: 15 months

62. Tentative budget (in US \$)

1981		1982	
MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC
10,000	7,500	61,000	10,000

B. DEVELOPMENT AND STRENGTHENING OF ENVIRONMENTAL IMPACT ANALYSIS CAPABILITY

63. Long-term objective: To promote environmentally-sound development through adequate land use planning and application of technologies which reduce environmental deterioration to the lowest possible level.
64. Short term objective: To review the manpower situation in the environmental planning sector of all countries in the Region and, as appropriate, to design training programmes for planning officials and engineers in charge of receiving and/or implementing plans for major development projects. To identify the most prevalent negative environmental impacts of typical major projects in the ecosystems of the Region and the determination of practical measures that would result in a reduction of environmental damage. To create or strengthen an interdisciplinary capability within the Region on a national and/or subregional basis to assess the environmental impacts of major projects. To develop suitable training materials.

Background and justification

65. Many of the environmental problems result from the type of development process pursued. It is not development per se that has caused environmental problems. Sustainable development must be based on environmentally-sound development policies, i.e. policies that account for the rational utilization of available resources and the natural capacity of a given ecosystem to support the utilization of those resources, non-renewable and renewable. In their legitimate quest to improve the socio-economic standards of living of their people and to satisfy their most basic human needs, the countries of the Mediterranean must vigorously pursue the implementation of development activities in the many socio-economic sectors.
66. It has been found, however, that when serious consideration is not given to the interaction of particular major projects with the surrounding environment, other economic options, and even the benefits that may have accrued from the project itself, are either impaired or eliminated.

67. There exists a great need to provide environmental management training of the professionals and public officials in charge of designing, reviewing and constructing these major development projects, and to develop an interdisciplinary capability at a national, subregional or regional level to assist the Governments in assessing the environmental impact of major developmental activities.

Activities

68. - A survey of the principal environmental impact problems of major developmental activities in the Region will be carried out based on existing documentation and selected consultations with Government and industry.
- A two-week training seminar on environmental management for development plan officials and engineers will be held. The seminar will focus on problems specific to the Region and will highlight, with the use of specific examples, the environmental and economic cost of poorly planned projects and the benefits that can be accrued from incorporating environmental criteria in the project's design.
 - Training activities at the managerial and technical levels will be undertaken as necessary in environment-related fields where experts are lacking in the Region. Special short-term training courses in beach protection, coastal mining, coastal engineering, the aluminium industry, solid waste management and coastal zone management will be conducted in the Region.
 - Arrangements will be made for exchange programmes between governmental institutions to provide on-the-job training in environmental fields.

Outputs

69. - Report identifying the principal environmental impacts of development projects by means of matrices showing the relationship between types of projects and effects on the environment.
- Report analysing the existing mechanisms for developmental project review and recommending practical measures to develop or strengthen such inclusions in the form of a standard handbook for environmental impact assessment.
 - Seminar for public officials (planners) and engineers in environmental planning and impact assessment.

- Programme for short-term training courses in environment-related fields of priority to the Region such as:

the aluminium industry
coastal mining
coastal engineering

- Programme for intercountry exchange of professionals engaged in planning and environmental management for on-the-job training.
- Publication and development of standard manuals on the subject matters discussed and developed for the short training courses in environment-related fields.
- Award of fellowships
- Implementation of intercountry exchange programme for on-the-job training of public officials in charge of environmental management and planning.
- Short-term training courses held in specific subject areas of high priority for environmental management in the Region.

Duration of project: 36 months.

70. Tentative budget (in US \$)

1981		1982		1983	
MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC
74,000	15,000	40,000	50,000	152,000	50,000

C. PROMOTION OF ONGOING DEVELOPMENT PROJECTS WHICH HAVE BENEFICIAL ENVIRONMENTAL EFFECTS FOR DEMONSTRATION PURPOSES

Objectives

- 71. To support and expand the most significant national, regional or internationally supported development projects already under way in the Region which have beneficial environmental effects, in such a way that they can serve as regional demonstration and training sites.

Background

72. The countries of the Mediterranean have experienced unprecedented rates of growth during recent years, particularly in urbanization, industrialization, agriculture, transport, trade and the exploration for and exploitation of the Region's natural resources. Continuous socio-economic development without adverse effects can only be achieved on a sustainable basis if environmental considerations are taken into account.
73. There are in the Region several development projects which have beneficial environmental effects: environmental sanitation and industrial waste treatment projects under the auspices of national Governments and in collaboration with international organizations. These, or other similar projects, should be strengthened and expanded through MAP. Because of their beneficial consequences they could serve as demonstration and training sites for the Region.

Activities

74. First phase

- National, regional and internationally supported projects of the Region which have beneficial environmental effects will be identified. This will be accomplished by PAP/RAC through collaboration with nominated national focal points and United Nations organizations.
- Visits will be made to the headquarters of selected projects about which insufficient information is available.

Second Phase

- Arrangements will be made to utilize environmentally beneficial projects as part of a regional training programme. The training programme will be organized in conjunction with these projects, and countries will be asked to nominate participants.

Outputs

75. First phase

- List of national, regional and internationally-supported projects with beneficial environment effects.
- Identification of prototype activities that should be expanded for demonstration and training purposes.

Second phase

- Training courses associated with ongoing projects.

Duration of project: 12 months.

76. Tentative budget (in US \$)

1982		1983	
NTF	PAP/RAC	NTF	PAP/RAC
UNEP		UNEP	
74,000	60,000	131,000	50,000

D. DISASTER RISKS IN THE MEDITERRANEAN REGION

Objectives

77. - To avoid the negative effects of natural and man-made disasters on man and the environment.
- To provide recommendations to minimize the negative effects of natural and man-made disasters on man and the environment.
 - To develop a criterion for design and construction of low-cost disaster-resistant housing.
 - To develop an adequate system of technical and other measures to avoid large forest fires.
 - To recommend appropriate technology to combat large forest fires in the Mediterranean region.

Background

76. Disasters, both natural and man-made, occur relatively often in the Mediterranean region. The main risks relate to floods which affect all Mediterranean countries; earthquakes, which in the recent past have struck Italy, Yugoslavia, Greece, Turkey, Algeria and Morocco; forest fires, landslides and soil erosion which affect the whole region; volcanic eruptions in Italy; oil spills in the whole Mediterranean.

79. Most of the disasters resulting from these phenomena or accidents directly affect the development of the countries concerned.
80. Natural disasters are an inherent risk of the environment, which is sometimes made worse by man's activities. Also, disasters, whether natural or man-made, directly affect the environment. By and large, as far as natural disasters are concerned, it can be said that this is a case where the problem is mainly one of protecting man from the environment and not the other way round.
81. In the present state of knowledge, one cannot say, except a few hours in advance in some cases, when a natural phenomenon likely to cause a disaster is going to happen, but one can determine with a fair degree of accuracy where it will occur. Knowing where the risk exists means that basic preventive measures related, first, to physical planning and land use and, second, to building codes and other technical measures, can be taken. Also, when the disaster happens, technical and other measures should be taken immediately to minimize its effects.

Activities

82. Activities in this field will be carried out in three phases:
- (i) Preparatory phase for the development of a regional project.
 - (ii) Pilot projects dealing with problems identified in the first phase which are expected to produce solutions for the problems and recommendations containing guidelines to be worked out in the third phase.
 - (iii) Final report(s) which should contain results of the pilot projects and recommendations and guidelines on the subject(s) investigated.

Preparatory phase

83. In collaboration with Governments of the Region, and by using existing surveys or studies, and in co-operation with international bodies such as UNDRD and UNIDO, a feasibility study would be prepared. The feasibility study should have two parts; one defining problems in the field of natural and man-made disasters in the Mediterranean area, and the second one defining elements for any possible regional co-operative project(s).
84. The study will be presented to the meeting of experts from the Mediterranean countries. The meeting should give suggestions for the second and third phase of the project.

Duration of the preparatory phase: 18 months.

65. Tentative budget (in US \$)

1982		1983	
MTF UNEP	PAP/RAC	MTF UNEP	PAP/RAC
40,000	30,000	60,000	20,000

IV. INSTITUTIONAL FRAMEWORK

General

66. The institutional arrangements relevant to this programme document are based on the recommendations given by the Intergovernmental Meeting convened in Split, 1977, and reconfirmed by the Intergovernmental Meeting in Geneva, 1979; and on practices applied by UNEP in implementing programmes, taking into account the specific priorities, needs and capabilities of the Region.
67. To this end, a mechanism will be established which uses, to the greatest possible extent, the national capabilities available in the countries agreeing to participate in each particular activity, and the support of existing international organizations and co-ordinating bodies, and which will deal with national institutions through appropriate national authorities of the States concerned. Institutions or organizations from outside the countries involved in a particular action, preferably from the Region, would be involved in this programme if necessary.
68. The efficient implementation of the proposed projects and their results will depend on action at regional, subregional and national levels. It is, therefore, very important to identify the lines of authority and communication on policy and working levels and to develop appropriate institutional capabilities and co-operative mechanisms at each of these levels.

Overall authority

69. The overall authority to determine the contents of the proposed projects, to review their progress and to direct their course, including the financial implications, lies with the Governments deciding to participate in the projects in consultation with the organizations and structures supporting their implementation.

90. The Intergovernmental Meeting of Mediterranean Coastal States is the decision-making body of the PAP, but the Governments may empower their National Focal Points to review the progress of the projects and to direct their course.

Co-ordination

91. In connection with all elements of MAP, UNEP discharges its responsibility through the Co-ordinating Unit. For PAP activities, two complementary mechanisms have been operating, namely the joint UNDP/UNEP Unit in Geneva and the Regional Centre for PAP in Split.

Execution of the projects

92. The Projects will be executed primarily by the national institutions, designated by their Governments to participate in the projects.
93. Designation of national institutions by their relevant national authorities should take into account:
- expertise in subjects pertinent to the programme;
 - availability of resources (laboratory space, equipment, etc.);
 - availability of manpower (scientists, technicians, support staff, etc.);
 - experience with projects of a similar nature (whenever possible);
 - knowledge of the area under study; and
 - potential for the pooling of resources.
94. In order to enable the fullest participation of the designated institutions and to promote their operational self-reliance, project tasks should, as far as possible, be assigned to these national institutions for direct implementation. Assistance will be provided to them in the execution of these tasks through the MAP. This assistance primarily consists of the training of personnel (scientists, managers, technicians), preferably within the Region, such as:
- individual training at existing national, subregional, regional or international institutions ready to offer their facilities;
 - opportunities for on-job training and local manpower development;

- group training courses for specific technical subjects;
- workshops and seminars for exchange of experience; and
- meetings of regional experts periodically to review the programme and the results obtained.

95. At the request of national institutions participating in the PAP, experts from outside the Region would be made available to work with them.

96. National experts from the Region will be assigned to the implementation of the regional projects and, as far as possible, directly involved in the management and execution of the projects. Thus, continuity of the programme at the operational level will be ensured. For the same purpose, experts from outside the Region assisting in project implementation will be brought into close working contact with national counterparts.

V. BUDGETARY IMPLICATIONS

97. The tentative budget for the proposed activities covered by contributions from the Mediterranean Trust Fund is presented in Table 1. It is expected that resources from UNDP funds will be made available for the Priority Actions Programme and that some additional resources might be expected from other international and national funds. The Yugoslav Government will continue to provide support for PAP/RAC.

TABLE 1. PRIORITY ACTIONS PROGRAMME BUDGET 1981 - 1983
IN US \$

ACTIVITY	Preparation, Co-ordination & Synthesis		Implementation of Pilot Projects		TOTAL from MTF UNEP	TOTAL
	from MTF UNEP	from PAP/RAC	from MTF UNEP	from OTHER SOURCES		
HUMAN SETTLEMENTS	212,800	145,000	725,000	1,000,000	937,800	2,082,800
TOURISM	283,800	145,000	500,000	650,000	783,800	1,578,800
WATER RESOURCES	72,000	38,500	-	-	72,000	110,500
SOIL PROTECTION	340,000	85,000	450,000	1,100,000	790,200	1,975,200
SURVEY OF NATIONAL CAPABILITIES	71,000	17,500	-	-	71,000	88,500
DEVELOPMENT AND STRENGTHENING OF ENVIRONMENT IMPACT ANALYSIS	266,000	115,000	-	-	266,000	381,000
PROMOTION OF ONGOING DEVELOPMENT PROJECT	205,000	110,000	-	-	205,000	315,000
DISASTER RISKS	100,000	50,000	-	-	100,000	150,000
GRAND TOTAL	1,550,800	706,000	1,675,000	2,750,000	3,225,800	6,681,800

ANNEX I

Information on PAP/RAC

General

1. PAP/RAC was established with the aim of identifying, in close co-operation with the Governments of the Mediterranean countries, through National Focal Points, the needs and interests of individual Mediterranean countries for initiation and realization of individual actions within MAP. PAP/RAC operates on the basis of the decisions and resolutions of the Meeting of the Contracting Parties and the meetings of National Focal Points.
2. Contacts with the Governments of the Mediterranean countries are made through National Focal Points, by regular exchange of correspondence, telexes and information bulletins. PAP/RAC organizes meetings of National Focal Points, when the development of each planned action is elaborated upon, actions are redirected and the manner and terms of the undertaking of new actions are agreed upon.
3. An International Advisory Board, as well as a national technical Advisory Panel will be established.

Activity

4. The activity of the Centre is primarily to set up the needs and to initiate individual actions within the MAP. The Centre is responsible for the preparation of a feasibility study for each planned priority action included in MAP.
5. The Centre is responsible for the co-ordination of each individual action.
6. For those actions which were begun prior to the establishment of the Centre, the Centre will utilize the results of each phase as well as the final results, and will correlate them with the results of other actions, and will distribute the results obtained to all interested Governments in a form suitable for use by local authorities.
7. Therefore the Centre should be very well informed about all activities carried out in the framework of MAP and be in close contact with the Blue Plan.
8. PAP/RAC will distribute the reports of each phase as well as the final reports on the execution of each action whose activities it has co-ordinated.

9. The Centre will issue a Bulletin four to six times a year which will contain information on the development of each individual action, as well as other information relevant to the Mediterranean Action Plan.

Staff

10. For the purpose of executing planned operations within the Centre, the Yugoslav authorities will provide the director of the Centre, an assistant director, and a secretary, as well as all necessary auxiliary technical personnel. It is recommended that UNEP provide an associate with specific experience of United Nations operational procedures.
11. For the execution of professional operations within individual activities for which the Centre is responsible, the Centre will engage Yugoslav institutions and experts, as well as experts from other Mediterranean countries.