



UNITED NATIONS ENVIRONMENT PROGRAMME
MEDITERRANEAN ACTION PLAN

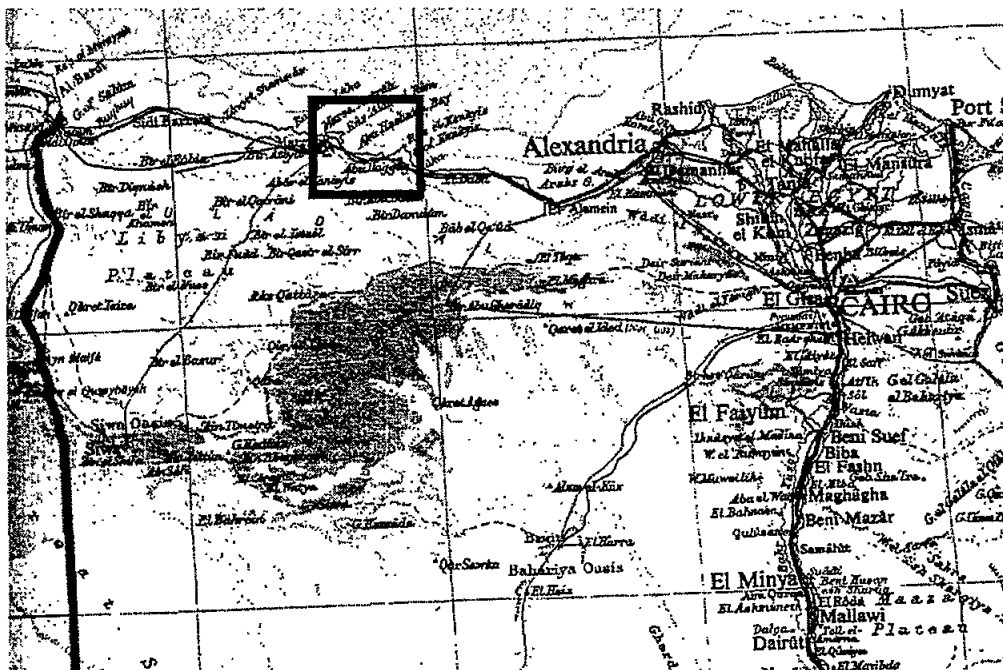


PRIORITY
ACTIONS
PROGRAMME



Coastal Area Management Programme (CAMP)
FUKA-MATROUH - Egypt

Report
of the Final Presentation Conference
for the CAMP "Fuka-Matrouh"
(Cairo, June 8-9, 1999)



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Background Information

1. The Coastal Area Management Programme (CAMP) is the MAP programme for sustainable coastal management, integrating environmental concerns into development planning and practice, oriented at understanding and resolving practical environmental, development and management problems at local and national levels in Mediterranean coastal areas. The geographic context of the Programme is defined by the Barcelona Convention, and encompasses the Mediterranean marine environment and its coastal and watershed areas. The Programme started in 1989, on the basis of a decision by the Contracting Parties to the Barcelona Convention adopted at the Athens meeting.

The objectives of the Programme are:

- a) to develop strategies and procedures at local and national levels for a sustainable development, environment protection and rational utilisation of coastal and marine resources, to be also used as inputs for Mediterranean strategies for sustainable development,
- b) to identify, adapt, and test, in a realistic operational context, methodologies, tools and practices for sustainable coastal management in the region,
- c) to contribute to the upgrading of relevant national/local institutional and human capacities, and
- d) to secure a wider use, at national and regional levels, of experience and results achieved by the Programme and its individual projects, and create conditions for follow up.

The Programme provides to all MAP RACs and MEDPOL the opportunity of a harmonised joint practical work with the host-country national and local authorities and institutions, demonstrating the capacity for integration and application of best methodologies, procedures and tools in real conditions, dealing with complex environment/development problems in coastal and marine areas and watersheds. So far, 6 CAMP projects have been completed, 2 are in implementation, and 5 new ones are in preparation.

2. The CAMP "Fuka-Matrouh" was developed at the request of the Egyptian Government which expressed its commitment to the philosophy of the integrated planning and management of the coastal area of Fuka-Matrouh and invited the Co-ordinating Unit of the Mediterranean Action Plan to initiate the Project. Preliminary activities relevant to the coastal area of Fuka-Matrouh started in the end of 1988. Several MAP/PAP missions visited Egypt in the period 1988 - 1992. Together with the Egyptian authorities and the Regional Activity Centres (RACs), they prepared a proposal for the Coastal Area Management Programme (CAMP) for the Coastal Area of Fuka-Matrouh. In October 1992, the Egyptian Government and the Mediterranean Action Plan signed the "Agreement Relative to the Coastal Area Management Programme for

the Coastal Area of Fuka-Matrouh (Egypt)". According to that Agreement MAP agreed to implement a number of activities, in co-operation with national and local authorities, as well as expert teams from universities and other organisations, with the main goal of ensuring sustainable development of the Fuka-Matrouh area.

3. The first Project presentation conference took place in Marsa Matrouh in September 1995. By that time most of the sectoral project activities had been completed, and some others were launched. The results achieved and outputs produced at the time were presented, and directives for future work were elaborated. Accordingly, in the period of 1996-98 the rest of the Project activities were completed, and in the beginning of the year 1999 the decision was taken to organise the Final Presentation Conference. The main purpose of the Conference was to present the outputs and final results of the Project to the Egyptian authorities at the national, regional and local levels, as well as to discuss the lessons learned and to formulate recommendations for follow-up activities.

4. The Final Presentation Conference was organised on June 8-9, 1999 at the "Marriott" Hotel in Cairo. It was attended by 45 representatives of Egyptian authorities and institutions, MAP, and other national and international institutions and organisations. A complete list of participants is attached as Annex I, while the agenda of the Conference is contained in the Annex II. The list of documents presented in the Conference is given as Annex III.

5. Mr. I. Abdel Gelil, Chief Executive Officer of EEAA, welcomed the participants on behalf of Egyptian authorities. He stressed in his opening statement that this conference marked an important milestone in the coastal area management programme. He acknowledged the high level of expertise and dedicated efforts of the Fuka-Matrouh project team throughout the project implementation, and pointed out the commitment to implement the Law on the Environment. He singled out partnerships and stakeholder involvement as important policy tools at the national level, including ministries, governorates, the private sector, local communities and NGOs. He particularly pointed out the replicability of the Fuka-Matrouh methodology in other equally sensitive areas as one of the main features of the project. The complete text of Mr. Abdel Gelil's speech is presented in the Annex IV.

6. Mr. L. Chabason, Co-ordinator of MAP, greeted the participants on behalf of Mr. K. Toepfer, Executive Director of UNEP. He expressed gratitude to H.E. Ms. N.M. Ebeid, Minister of State for the Environment, Mr. I. Abdel Gelil, Chief Executive Officer of EEAA, and Mr. A. Abu Azm, Head of Environmental Management Section of EEAA, for their continued support to the Fuka-Matrouh project implementation. He also thanked H.E. Mr. K. Amer, Governor of Matrouh, and Mr. M. El-Raey, Dean of the Institute for Graduate Studies and Research (IGSR) of the University of Alexandria, as well as the members of the national and local teams for their involvement in the project implementation, and Mr. D. Štambuk, Ambassador of Croatia. Mr. Chabason gave a brief information on MAP activities emphasising the importance of CAMP and specifying its objectives including support to national ICAM initiatives and capacity building. He also briefly mentioned the individual project activities and the overall methodology, particularly emphasising the recognition and designation of environmentally sensitive areas. Among the individual activities he paid particular attention to the ICAM Planning

Study and the intensive development concept proposed, and pointed out the need for an appropriate administrative system to support the implementation of such complex projects. The complete text of Mr. Chabason's statement is presented in the Annex V.

7. Mr. L. Chabason proposed the Officers of the Conference. His proposal was accepted and Mr. M. El-Raey acted as Chairman of the Conference, and Mr. G. Berlingi as Rapporteur.

8. Mr. M. El-Raey, University of Alexandria, presented a general overview of the CAMP "Fuka-Matrouh". He emphasised the common Mediterranean heritage as a basis for co-operation. He informed on the principal groups of activities and their inputs, stressing particularly the integrative activities, such as GIS data base development, CCA, ICAM Planning Study, and SEA. He expressed his expectation that the Conference would come out with some follow-up proposals for the activities that showed great potential and applicability. Copies of the transparencies that accompanied the presentation are enclosed in Annex VII.

9. Mr. I. Trumbić, Director of PAP/RAC, presented the Final Integrated Report of the CAMP "Fuka-Matrouh" project. He went more in detail in describing the project objectives, activities and their results. First he described the project study area and its representativeness with regard to its main development issues which include:

- Uncontrolled development of tourism;
- Complex natural conditions requiring sensible agricultural policies;
- Ecologically and environmentally sensitive areas, as well as valuable cultural heritage;
- Absence of an effective land-use planning and development control system;
- Insufficient integration of policies among various bodies in charge of different sectors or geographic segments of the coastal area.

He then explained the overall institutional arrangement needed for the project implementation. Mr. Trumbić displayed thematic maps and photos of the typical coastal environments and resources, and provided graphic examples of inappropriate tourism development practice in the project area. Finally, he gave a brief description of each project activity pointing out its significance and role with regard to the overall project objectives. Copies of the transparencies that accompanied the presentation are enclosed in Annex VIII.

10. The conference proceeded with the presentations of individual project activities. The first presenter was Mr. Ç. Aruoba, University of Ankara who presented the Systemic and Prospective Analysis. As a Blue Plan consultant, Mr. Aruoba took part in the mixed, national and international working team, which started its activity in the year 1992 with the report of Mr. Ayyad entitled "A Framework for Accumulating Data and Knowledge Required for the Coastal Area Management Study for Fuka-Matrouh Region". An additional important source of information was a large number of interviews that were conducted with the resourceful national experts, while, at the same time, the lack of numerical and statistical data on the area limited the extent of quantitative analyses as a methodological tool. The study elaborated the interactive relationship between development and environment in a long-term, 30 year time horizon. Geographic

reference was a wider area, the Matrouh Governorate and the Mediterranean coast of Egypt. Considering the future development paths the analysis took into account global and regional trends and impacts, and identified conflicting zones, sectors and key actors, as well as needed adjustments. Specific environmental problems were identified, the most urgent and important being the destruction of limestone ridges, coastal erosion and loss of natural vegetation. Among the economic activities building of tourist villages, for example, is related to all three problems. The population growth forecasts envisaged a rapid growth of the Matrouh city and the region based mostly on immigration, followed by the economic and social development at a faster pace than for the rest of Egypt. The most important economic activities in the area are agriculture and tourism, followed by transportation, trade and construction. Following the Blue Plan methodology, two scenarios were formulated and analysed: a trend scenario which would lead to significant environmental degradation, and an alternative scenario based on sustainable development paradigm. As a conclusion, an important role of the regional and local governments (as effective extensions of the national government) was emphasised, primarily in setting up and implementing the environmental management function. Copies of the transparencies that accompanied the presentation are enclosed in Annex IX.

11. Mr. C. Rais, SPA/RAC expert, presented their activity entitled "Specially Protected Areas – Marine and Terrestrial Ecosystems and Cultural Heritage". The objectives of the activity were to integrate natural and cultural heritage conservation with the existing and planned human activities by identifying the main terrestrial and marine ecosystems, and determining the level of their ecological sensitivity. The activities carried out included data collection on marine and terrestrial ecosystems for the coastal area from Alexandria to the Libyan border, and identification of sites of interest with special emphasis on marine vegetation, turtles and marine mammals. The first study on terrestrial ecosystems was prepared by Mr. Ayyad from the University of Alexandria, while the marine ecosystem study was prepared by the team lead by Mr. Beltagy from the National Institute for Oceanography, based on the available information, and covering, among other topics, geomorphology, bathymetry and climate, as well as all kinds of marine life. Among the sensitive marine ecosystems, Rass El-Hekma, Abu Hashafa Bay with the Matrouh lagoon are the most important ones. On the terrestrial side, seven habitats were identified with information on status, distribution and ecology, including the need for further research to bridge the baseline information gap. A detailed survey of the wider area on the marine turtles nesting occurrence (Gulf of Hekma, Abu Hashafa Bay) was carried out, and few sites were identified. Recommendations on natural resources management included measures such as:

- grazing control (including pilot and demonstration projects), as well as propagation of multipurpose and native species;
- marine meadows protection (i.e. *Possidonia oceanica*) as very important habitat with many useful roles for marine life and coastal stability.

As an important follow up activity a marine ecosystems survey was proposed. The programme is ready and SPA/RAC is prepared to contribute to its implementation. In addition, the establishment of a network of protected areas (including Ras El Hekma within the study area) along the Mediterranean coast of Egypt was proposed. All the

proposed activities should be implemented together with the local and national stakeholders, including the National Biodiversity Unit.

With regard to the cultural heritage a wider area was examined (East, West and South of Matrouh) where the major sites were analysed and the management measures proposed, including the definition of the site zoning, with a core area, exclusion zone, buffer zone, and approaches and service area. Copies of the transparencies that accompanied the presentation are enclosed in Annex X.

12. As the next speaker, Ms. I. El Bastawisi, University of Alexandria, talked about naturally attractive areas and valuable landscapes, specially from the point of view of tourism development. She presented some of those sensitive areas and proposed management measures, such as exclusion from development, establishment of buffer zones, and access regime. She also suggested setting up environmental awareness and education centres to promote natural heritage values and its protection. Mentioning the cultural heritage sites, she pointed out the need for high-quality presentation, in addition to the inherent value of the site itself.

13. During the discussion on the morning presentations, the following issues were raised:

- the need to translate the documents in Arabic and make them available to other Arabic countries, as well as to regional and local level administration,
- the need to further analyse the position of the Bedouins, and the development impacts on their future in the area,
- problem of land mines and their cleaning,
- problem of seasonality of tourism and the need for extending the use of tourist facilities even in winter.

14. Some participants raised the question of the documentation on *Possidonia oceanica* in the Fuka-Matrouh area. Mr. Rais answered that the *Possidonia* meadows had been observed during the field trips but no specific mapping had been done. The proposed marine survey should provide more detailed information on this subject.

15. It was also emphasised that EEAA had made an extensive study on setting up new protected areas all over Egypt including the Mediterranean coast, and covering, for example, Ras El Hekma area. Nevertheless, the need exists for detailed mapping of the sensitive or attractive areas as a basis of protection measures formulation, and as input for local land-use planning.

16. During the discussion the potential of the overall development of the Fuka-Matrouh area was emphasised, including the commercial tourism and agriculture. This should attract immigrants and intensive growth which, in turn, require effective environmental management (i.e. waste treatment facilities, environmental monitoring), enforcement of EIA according to the relative laws, and adequate institutional capacity. However, some of the participants reminded that tourist season in the area is rather short, particularly compared with the Red Sea region, which inhibits developers and requires some additional attractions or incentives for the development of commercial tourism.

17. The activity on Soil Degradation and Desertification was presented by Mr. F. Abdel Kader and Mr. M. Bahnasy, University of Alexandria. The need was emphasised to pay equal attention to the hinterland area as it had been done with the coastal strip and tourism development. Accordingly, Mr. Abdel Kader pointed out the need for land information system as a planning tool to be used in regional and local land-use planning and environmental management. He briefly described two pilot areas where the in-depth study was carried out. The land information system produced comprises an inventory part, multidisciplinary in nature, covering different topics of interest (population and socio-economic data, geology, geomorphology, hydrology, climate and the like), and needed in producing synthetic information required by policy makers. Mr. Abdel Kader further briefly described seven methodology components and techniques employed during the activity. An interesting and important part of the activity was watershed analysis using special software tools and including the training courses organised with international experts. The same softwares were eventually installed at the Alexandria University and today are at the disposal of the national team. In calculating soil erosion index, parameters, such as slope and aspect, were taken into account and extracted from the Digital Elevation Model (DEM) of the area. One of the outputs was the system of physiographic units produced using, among other sources of information, photointerpretation of satellite images. These information also became part of the project GIS. Finally he presented the soil unit map describing soil types and their features, as well as the land suitability map for agriculture and grazing for two pilot sites

18. Mr. M. Raimondi, Director of ERS/RAC, presented his centre's contribution to the CAMP. He briefly introduced the ERS/RAC and its activities in the Mediterranean. He presented the working team he had worked with in the Fuka-Matrouh project, and pointed out the need for the assessment of natural resources in the study area using remote sensing, and integrating these information within the outputs of other Project activities.

19. Mr. M. El-Raey, University of Alexandria, presented the activity "Assessment of Natural Resources through Remote Sensing in the Coastal Area of Fuka-Matrouh: The Land System Map". He briefly presented different types of information on natural resources, such as quality and availability of water, climate, geology and geomorphology, as well as techniques, such as visual interpretation of satellite images for definition of general land units and field survey. The field survey covered almost fifty sample points and was needed as ground truthing in image classification process and to help in identifying homogeneous land units. He also showed the classified image for the whole area providing information on land cover and land uses in the area. Finally he presented the land units map for the whole area. In conclusion, he emphasised the usefulness of remote sensing in extracting important and consistent information on the natural resources of the study area, as well as in following changes over time and recognising trends. Copies of the transparencies that accompanied the presentation are enclosed in Annex XI.

20. Mr. F. Abdel Kader, University of Alexandria, spoke of the integration of remotely sensed and *in situ* data for the provision of soil conservation measures in the coastal area of Fuka-Matrouh. He first presented the stage in which extrapolation of data from two pilot sites to the whole area had been carried out, using different scales and data

sources. The purpose was to provide information for regional-scale policy making such as the ICAM Planning Study preparation. He emphasised the need to set up a common legend to describe the relevant features of the area. This was done during the joint work of the national teams and international team. He also presented the final maps showing soil features and land suitability for different agricultural uses. Finally, he emphasised the need for integration of more information, in addition to biophysical ones, including the socio-economic data and the local knowledge of indigenous population (the Bedouins), to be able to assist the policy makers and planners in defining land uses and proposing the best management practices. In addition, he suggested the watershed basins, 23 in the area, as appropriate spatial and management units.

21. Mr. S. Abdel Rahman, National Authority for Remote Sensing and Space Sciences, presented the activities of his organisation in the field of remote sensing at the national and regional levels, mostly dealing with projects on natural resources assessment and evaluation. An important role of NARSS is to enable transfer of high tech knowledge and information from international to national levels. He also talked about the Cairo Forum in 1998 on the Remote Sensing Techniques in Planning and Decision Making Processes for Sustainable Development, and briefly presented the proposal for land and water resources management projects consisting of three components and dealing with three areas along the Mediterranean coast of Egypt.

22. During the discussion the following issues were raised:

- the coastal erosion and climate changes impacts are important issues, and care should be taken of these phenomena (coastal erosion is one of the four main coastal issues as identified by the Framework Programme for the Development of a National ICZM Plan for Egypt);
- the use of satellite data in the study area, having in mind rather low erosion rates, is still limited, but the technology moves ahead quickly and almost in a year's time we can expect resolutions which will enable effective monitoring of this phenomenon;
- high variability and heterogeneous conditions require micro-scale generalisation which makes the land unit system very complex; and
- it would be worthwhile to investigate not only the farming systems based on traditional species, but also some innovative ones that may, for example, sustain even saline conditions which are prohibited for cereals.

23. The second day Conference started with the overview of the activities carried out by IGSR (Geographical Information Systems - GIS, Carrying Capacity Assessment - CCA, Integrated Coastal Area Management - ICAM Framework Plan, and Strategic Environmental Assessment - SEA), presented by Mr. M. El-Raey, University of Alexandria. He started with a brief coastal profile of the study area emphasising the main environmental issues including the most important one – the lack of institutional capacity to carry out an effective environmental management process. He also described the main advantages of the area including the favourable conditions for tourism development. Finally Mr. El-Raey talked briefly about each of the mentioned Project activities that would be presented during the second day of the Conference.

24. Mr. G. Berlengi, PAP/RAC consultant, talked briefly about the organisation and contents of the Geographical Information Systems (GIS) component of the Project. He pointed out the role of maps and mapping in the overall planning process, as well as for efficient and precise communication among the project team members. He also talked about the relationship between environmental information and public policy making, and emphasised the need for production of policy-oriented information to support directly planners and decision makers, and which should become part of the GIS. Another important point was the need for the present project-level GIS to evolve to an institutional system, maybe within the EEAA regional branches. Copies of the transparencies that accompanied the presentation are enclosed in Annex XII.

25. Application of Geographical Information Systems (GIS) in the Fuka-Matrouh Project was explained by Mr. M. El Hattab, University of Alexandria. He went into more detail presenting the GIS database and applications developed within the Project. He started with the description of data sources used for the database development and, in addition to traditional hard copy maps, he pointed out the remote sensing as a highly valuable source of consistent data. In addition, he mentioned GPS as a technology used to improve georeferencing of images and checking out positions of existing features on the maps. He continued by showing the examples of spatial and attribute information on the natural resources and the socio-economic features of the area. Then he presented the land suitability analysis which was based on a number of layers of different spatial data concentrating primarily on revealing the land suitable for tourism development while preserving the land suitable for agriculture. Finally, he stressed the fact that the GIS developed was a dynamic system requiring regular updating and verification.

26. Mr. G. Berlengi, PAP/RAC consultant, talked briefly about the organisation of the activity on Carrying Capacity Assessment (CCA) for Tourism and its role in the overall planning process. He stressed the importance of the decision on the amount of future tourism development within the Fuka-Matrouh Project, particularly given the present trends. That is why CCA technique was introduced and applied in the Project. In addition, an attempt was made to avoid raw calculations that pretend to deliver outputs with cold objectivity, but which are practically unusable. Instead, socio-economic and cultural parameters were introduced into the analysis to make it more realistic and comprehensive. Copies of the transparencies that accompanied the presentation are enclosed in Annex XIII.

27. Mr. S. El Kaffas, University of Alexandria, started his presentation with some background information on the study area relevant for the CCA study preparation. Then he explained the methodology and described the procedure itself. He emphasised the participation of the local population through questionnaire and field survey which were conducted to find out more about their attitude towards tourism development. The results showed that 70% of the people accepted the possibility of involvement in the tourism related activities, as well as in relevant training programmes. Copies of the transparencies that accompanied the presentation are enclosed in Annex XIV.

28. Ms. I. El-Bastawisi, University of Alexandria, went on with the presentation on CCA for tourism talking about four tourism development options and describing advantages and disadvantages of each of them. The adopted sustainable tourism development

option is based on the tourism product designed to attract both domestic and international markets, and, as a result, to extend the tourist season. At the end of her presentation Ms. El-Bastawisi presented the carrying capacities of the area according to different parameters, namely the physical and ecological parameters, the socio-cultural parameters, and the political-economic parameters.

29. The approach to the preparation of the Integrated Coastal Area Management (ICAM) Planning Study was presented by Mr. A.-K. Abdrabo, University of Alexandria. He singled out the three most important characteristics of the ICAM process, namely:

- full co-ordination among national, regional and local objectives and policies,
- integration of planning and implementation,
- public and stakeholder participation in the process.

He briefly summarised demographic and economic trends which served as a basis in making decisions on the area development concept. This concept proposed in the Fuka-Matrouh Project and shown within the study area boundaries was the result of the consideration not only of the resources and processes within the study area, but also of the whole Mediterranean coast of Egypt. The two most important external factors influencing the concept are the national population decentralisation and the dispersal of international tourist development. Copies of the transparencies that accompanied the presentation are enclosed in Annex XV.

30. Mr. A. Parpairis, PAP/RAC consultant, went on with the presentation of the ICAM Planning Study showing the overall structure or framework of a future development till the year 2020, by means of written policies and diagrammatic maps and schemes. He described the intensive, knowledge-based development concept by presenting proposed population distribution in the study area according to the population growth forecast, as well as distribution of existing and planned tourist accommodation capacities. Mr. Parpairis also emphasised the importance of the protection of the area's natural and cultural heritage, and the need to exclude those sites from the areas proposed for development. Finally, he talked about the spatial development concept consisting of mixed-use, linear peri-urban villages east and west of the Matrouh city, with tourism installations closer to the waterfront, residential or rural areas behind, and agriculture and light industry facilities (i.e. agroprocessing and handicrafts production) closer to the main transportation corridors.

31. Mr. I. Trumbić, PAP/RAC Director, introduced the Strategic Environmental Assessment (SEA) of the ICAM Planning Study. He briefly defined SEA and emphasised the particular need in case of the Fuka-Matrouh area to ensure tools to assess not only the individual projects within the usually very limited geographic area, but also the totality of development programmes or plans covering wider coastal segments (i.e. cumulative impacts of tourist villages in the whole Fuka-Matrouh coastal strip). In addition, Mr. Trumbić explained more in detail the differences between the EIA and SEA concepts and applications, particularly the different planning levels at which one or another tool is to be applied. Copies of the transparencies that accompanied the presentation are enclosed in Annex XVI.

32. Mr. W. Mohamed, University of Alexandria, complemented the presentation on the SEA of the ICAM Planning Study by emphasising the following:

- identification of the impacts of the actions proposed by the ICAM Planning Study, their magnitude and significance;
- proposal of alternative solutions and mitigation measures;
- use of the matrix method; and
- presentation of around 30 actions and 20 impacts, negative as well as positive, which were analysed.

Copies of the transparencies that accompanied the presentation are enclosed in Annex XVII.

33. In the discussion, the following issues were raised and suggestions made:

- there is the possibility and need to develop fisheries but given the diet preferences of the local population, the demand may result from either international tourism development or exportation;
- land suitability concept and application were explained in detail, particularly their importance within the planning process, as well as their complementarity with the CCA for tourism development;
- the importance of appropriate institutional and legal solutions has to be emphasised if such an ambitious Project is to be implemented;
- a comprehensive strategic plan of the north-western coast of Egypt was prepared by the General Organisation for Physical Planning and is to be adopted soon - there is a need for even more intensive co-operation and co-ordination between the physical planning and environmental management systems;
- it is important to discuss the findings of the Fuka-Matrouh Project at the National Committee for Integrated Coastal Zone Management;
- the knowledge generated during the Project should be transferred to local levels serving as a capacity building tool for managerial functions;
- following the Fuka-Matrouh action plans, the National Co-ordinator for GEF Small Grants Programme offered the opportunity to support one or two projects for community based actions.

34. The Rapporteur presented the draft recommendations of the Conference prepared by the Secretariat. Those were discussed and amended as presented in the Annex VI.

Closure of the Conference

35. Mr. M. E-Raey thanked all his colleagues and partners who participated in the preparation and implementation of the Fuka-Matrouh Project. He pointed out that without international support and consultants their task would have been very difficult, and he particularly thanked MAP and its Centres involved in the Project for their support and enthusiasm.

36. Mr. L. Chabason, on behalf of MAP, thanked the Egyptian authorities for their support to the Project. He particularly mentioned the efforts made by EEAA, the national and local teams, PAP/RAC Director and staff, BP/RAC, RAC/ERS and SPA/RAC which

contributed to the achievements of the Project. He also praised the quality of the presentations and documents that were presented during the Conference. He also thanked the Chairman for performing his task efficiently and all the participants for active involvement in the work of the Conference. He suggested that the Egyptian authorities and PAP/RAC should prepare a proposal of a set of concrete projects to be submitted to the European Commission for the consideration in the framework of SMAP.

37. The Conference was closed on June 9, 1999, at 13:30 hrs.

ANNEX I

List of participants

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ANNEX II

Agenda

Tuesday, June 8

- | | |
|---------------|--|
| 09:00 – 09:30 | - Registration of participants |
| 09:30 – 10:00 | - Welcome statements and addresses:
- Mr. Ibrahim Abdel Gelil, CEO, EEAA
- Mr. Lucien Chabason, MAP Co-ordinator |
| 10:00 – 10:15 | - General overview of the CAMP “Fuka-Matrouh” – by Mr. Mohamed El-Raey |
| 10:15 – 10:45 | - Presentation of the Final Integrated Report of the CAMP “Fuka-Matrouh” project - by Mr. I. Trumbić, Director of PAP/RAC |
| 11:00 – 11:30 | - Systemic and Prospective Analysis - by Mr. Ç. Aruoba, University of Ankara |
| 11:30 – 12:10 | - Specially Protected Areas – Marine and Terrestrial Ecosystems and Cultural Heritage – by Mr. C. Rais, Expert, SPA/RAC |
| 12:10 – 12:30 | - Other areas to be protected – by Ms. I. El Bastawisi, University of Alexandria |
| 12:30 – 13:00 | - Discussion |
| 15:00 – 15:45 | - Soil Degradation and Desertification – by Mr. F. Abdel Kader and Mr. M. Bahnasy, University of Alexandria |
| 16:00 – 16:10 | - ERS/RAC Contribution to the CAMP: activities, achievements and follow-up – by Mr. M. Raimondi , Director of ERS/RAC |
| 16:10 – 16:30 | - Assessment of Natural Resources through Remote Sensing in the Coastal Area of Fuka-Matrouh: The Land System Map – by Mr. M. El-Raey, University of Alexandria |
| 16:30 – 16:50 | - Integration of Remotely Sensed and <i>In Situ</i> Data for the Provision of Soil Conservation Measures in the Coastal Area of Fuka-Matrouh – by Mr. F. Abdel Kader, University of Alexandria |
| 16:50 - 17:10 | - Forum in Egypt: Support of Remote Sensing Techniques to Planning and Decision Making Processes for Sustainable Development – by Mr. M.A. Yehia, Chairman of the National Authority for Remote Sensing and Space Sciences |
| 17:10 – 17:30 | - Discussion and conclusions |

Wednesday, June 9

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| 09:30 – 09:50 | - Overview of the activities carried out by IGSR (GIS; CCA; ICAM Framework Plan and SEA) – by Mr. M. El-Raey, University of Alexandria |
| 09:50 – 10:00 | - Application of Geographical Information Systems (GIS) in Fuka-Matrouh Project – Introduction by Mr. G. Berlengi, PAP/RAC Consultant |
| 10:00 – 10:20 | - Application of Geographical Information Systems (GIS) in Fuka-Matrouh Project – By Mr. M. El Hattab, University of Alexandria |
| 10:20 – 10:30 | - Carrying Capacity Assessment (CCA) for Tourism – Introduction by Mr. G. Berlengi, PAP/RAC Consultant |
| 10:30 – 11:00 | - Carrying Capacity Assessment (CCA) for Tourism – by Mr. S. El Kaffas and Ms. I. El Bastawisi, University of Alexandria |
| 11:15 – 11:40 | - Integrated Coastal Area Management (ICAM) Planning Study – by Mr. A.-K. Abdrabo, University of Alexandria |
| 11:40 – 12:00 | - Integrated Coastal Area Management (ICAM) Planning Study – by Mr. A. Parpairis, PAP/RAC Consultant |
| 12:00 – 12:10 | - Strategic Environmental Assessment of the ICAM Planning Study – Introduction by Mr. I. Trumbić, Director of PAP/RAC |
| 12:10 – 12:30 | - Strategic Environmental Assessment of the ICAM Planning Study – by Mr. W. Mohamed, University of Alexandria |
| 12:30 – 13:30 | - Discussion and lessons learned, conclusions and recommendations |

ANNEX III

List of documents

1. Eid, El Mohamady; Misak, Raafat: Report on the Existing Documents of the Fuka and Siwa Areas - Egypt, Cairo, August 1990 (PAP/RAC)
2. Eid, El Mohamady: Integrated Planning and Management of Fuka Area (Egypt), Cairo, 1990 (PAP/RAC)
3. Draft CAMP Project for Fuka-Matrouh Area (Egypt), Athens, 1992 (MAP)
4. Agreement Relative to the Coastal Area management Programme for the Coastal Area of Fuka Matrouh (Egypt), Athens, October 1992 (MAP)
5. Marine and Coastal Environment - Questionnaire, Split, March 1993 (PAP/RAC)
6. Ferrari, Giovanni: Proposal for the Study of Soil Erosion and Desertification in the Management Programme for the Coastal Area of Fuka-Matrouh (Egypt), Florence, April 1993 (PAP/RAC)
7. Beltagy, Ali Ibrahim: The Marine Ecosystems of Fuka-Matrouh Area (Egypt) – Status of Species and Habitats, Tunis, 1993 (SPA/RAC)
8. Kasperek, Max: Marine Turtle Conservation in the Mediterranean – marine Turtles in Egypt – Phase I: Survey of the Mediterranean Coast between Alexandria and El-Salum, Tunis, 1993 (SPA/RAC)
9. Ayyad, Mohamed Abdel-Gawad: The Terrestrial Ecosystems of Fuka-Matrouh Area (Egypt): Status – Protection and Measurement Measures, Tunis, 1993 (SPA/RAC)
10. Fawzi, Mohamed *et al.*: Up-Dated On-Site Report for the Fuka-Matrouh Area, Egypt, Cairo, November 1993 (PAP/RAC)
11. Report of the Workshop on Geographical Information Systems in Integrated Coastal Area Management (Alexandria, November 13-18, 1993), Split, November 1993 (PAP/RAC)
12. El Guindi, Mohamed Abdel Aziz; El Din Zulfikar, Mona Salah: A Legal Study of Environmental Legislations Relating to the Fuka Matrouh Area Project, 1994
13. Report of the Training Course on Soil Survey and Aerial Photo Interpretation (Marsa Matrouh, March 11-25, 1995), Split, March 1995 (PAP/RAC)
14. Esmael, Feisal A.: Cultural Heritage Sites of the North-Western Coast of Egypt, Tunis, 1995 (SPA/RAC)
15. Aruoba, Celik: Systemic and Prospective Analysis for an Environmentally Friendly Management, 1995 (BP/RAC)

16. Ayyad, Mohamed A.: A Framework for Accumulating Consequential Data and Knowledge, Alexandria, 1995 (BP/RAC)
17. Implications of Climatic Changes on the Coastal Area of Fuka-Matrouh - Draft, Athens, 1995 (MAP)
18. Land Based Sources of Pollution in Matrouh-Fuka Area, National Institute of Oceanography and Fisheries, Alexandria, 1995 (MEDPOL)
19. Assessment of Land Resources Supported by Remote Sensing, Palermo, September 1995 (RAC/ERS)
20. Abdel-Kader, Fawzi, et al.: Soil Degradation and Desertification – Final Report, January 1996 (PAP/RAC)
21. El-Raey, Mohamed, et al.: Inventory GIS Database and Sustainability Analysis of Fuka-Matrouh Area (Egypt), Alexandria, December 1997 (PAP/RAC)
22. El-Raey, Mohamed, et al.: A Framework for Integrated Coastal Area Management Plan of Fuka-Matrouh Area (Egypt), Alexandria, June 1998 (PAP/RAC)
23. El-Raey, Mohamed, Fawzi Mohamed, et al.: Strategic Environmental Assessment of the Integrated Coastal Area Management Plan of the Fuka-Matrouh Area (Egypt), Alexandria, December 1998 (PAP/RAC)
24. Integrated Coastal Area Management Planning Study for Fuka-Matrouh Area, April 1999 (PAP/RAC)
25. Carrying Capacity Assessment for Tourism Development in Fuka-Matrouh Area, June 1999 (PAP/RAC)
26. Assessment of Natural Resources and Soil Conservation Issues in the Coastal Area of Fuka-Matrouh, June 1999 (PAP/RAC – ERS/RAC)
27. Final Integrated Report of the Coastal Area Management Programme “Fuka-Matrouh – Egypt”, June 1999 (PAP/RAC)

ANNEX IV

Opening Statement by Mr. Ibrahim Abdel Gelil Chief Executive Officer of EEAA

It gives me great pleasure to welcome you today to this conference which marks an important milestone in the Coastal Area Management Programme. I would like to take this opportunity to acknowledge the high level of expertise and the dedicated efforts of the Fuka Matrouh project team throughout its implementation. I would also like to commend UNEP on its regional partnership initiatives which have effectively signalled to us – over the years – shared environmental concerns, green opportunities and global issues regarding our common future.

In 1975, twenty coastal states – including Egypt – and the European Union, signed an international agreement of great significance to all of us sharing the Mediterranean, that is the Barcelona Convention. Since then, a number of concrete programme agendas have been developed to operationalise the Convention, one of which is the Mediterranean Action Plan. The MAP is a clear expression of the level of alliances that is required at a regional, national and local level to address the complexity and interaction of issues relating to coastal zone management.

By the beginning of the next millennium, our shared Mediterranean will be accommodating approximately 600 million inhabitants. Three thousand years ago, this same Mediterranean set the basis of our geographical and social map that governs our interactions today. This is the reason why countries of the Mediterranean region are expressing a strong will to set the first world model for an ecoregion. However, will is not enough. I call upon our partner countries to act in progressive and uninterrupted complementarity of individual initiatives, to pursue a future path of action guided by environmental alternatives and consensus.

On a national level, we are promoting partnerships and alliances as a policy tool to realise our objectives in the long and immediate terms. We are effectively doing so through engaging with other ministries, governorates, the private sector, local communities and non-governmental organisations in practical interventions to resolve pollution problems and attain better environmental standards.

Our commitment to implementing Egyptian environmental laws is clear and our strategy to realise that commitment relies on a compliance and enforcement agenda of programmes and projects. These revolve around the principles of effective co-ordination and setting up a strong environmental infrastructure promoting decentralisation of environmental management and monitoring that would ultimately support the sustainability of environmental initiatives.

Our constructive participation in the Mediterranean Action Plan has brought forward a number of priorities that need to be assessed and acted upon. We have certainly benefited through the process in terms of our human resource, information and institutional capacity development in this field. The Fuka Matrouh experience lends itself to replicability in a number of equally vulnerable locations along the Mediterranean coast.

For all of these reasons and more, I shall be looking forward to our continued dialogue on how to further our co-operation. Perhaps the most important lesson that we have learned through our involvement with the Mediterranean Action Plan is that the range of stakeholders extends beyond political and institutional walls. There is plenty of room for non-governmental organisations, universities and others to network for a transitional collaboration to approach the totality of the environmental challenges that we are facing.

I trust that the process and the various outputs of this project will be openly shared by our speakers with the purpose of assisting us in setting new environmental targets to recover our Mediterranean.

I thank you for your attention and look forward to the outcome of your discussions.

ANNEX V

Statement by Mr. Lucien Chabason Co-ordinator of MAP

First of all allow me to avail myself of this opportunity to welcome all of you on behalf of the Executive Director of UNEP, Mr. Klaus Toepfer. May I also express on behalf of UNEP/MAP our gratitude to H.E. Ms. Nadia Makram Ebeid, the Minister of State for Environment of Egypt, to Mr. Ibrahim Abdel Gelil, Chief Executive Officer of the Egyptian Environmental Affairs Agency (EEAA), to Mr. Ahmed Abou El-Azm, Head of Environmental Management Sector of the EEAA, for their continued and encouraging support during the implementation of the Fuka-Matrouh CAMP project. My thanks go likewise to H.E. Mr. Kamal Amer, the Governor of Matrouh, and Professor Mohamed El-Raey, Dean of the Institute for Graduate Studies and Research of the University of Alexandria, and his national and local teams for their strong support and involvement during the implementation of the project.

During the first decade of the Mediterranean Action Plan (MAP), it was recognised that the bulk of MAP's activities had been focused on the monitoring of the state of the sea and interventions aimed at improving the state of the natural system. The emerging understanding that the sources of pollution are mostly (80%) land-based, and the necessity for the harmonisation of regional and global development with the reception capacity of the environment, which calls for a permanent process of integrated planning, as well as for a rational management of the limited resources available in the region, has led to the refocusing of MAP on activities carried out in coastal zones.

The refocusing of all MAP activities, within the framework of the Coastal Areas Management Programme (CAMP) launched in 1989, was viewed as the most concrete and practical phase of Mediterranean co-operation.

Within this programme, the problems of environment and development are dealt with in an integrated way, i.e. a coastal area is approached from all its aspects and their mutual interdependence. up to now twelve projects within the Coastal Areas Management Programme were selected in co-operation with the Mediterranean coastal states. The Fuka-Matrouh project was one of these twelve projects. The philosophy behind these coastal projects was to help the states define, or redefine, the development of problem areas while respecting the environment; mobilise towards this end national investments and promote greater international co-operation. The financial interventions of the World Bank, and the European Investment Bank in other CAMP projects was a clear example.

With regard to the Fuka-Matrouh CAMP, the general strategy was based on the principle of sustainable development and integrated planning and management of coastal resources. The thirteen activities which were embodied in the Agreement signed with the Egyptian Government have led to the preparation of an environmental management plan, integrating all knowledge gained through individual actions, with an objective of protecting, rationally utilise and ensure sustainable management of natural coastal and marine resources, over a relatively long period of time and resolving the existing CAMP

environmental conflicts and setting up the optimum paths of the future dynamic development, by integrating the environment in social and economic development and land-use policies.

The project was expected to provide the following benefits:

- to improve the state of environment of the area;
- to protect nature and protect and enhance sites and landscapes of ecological and cultural value;
- to incorporate environmental considerations into development planning activities and decision-making process;
- to enhance national and local capacities in solving various development and environmental problems (you will note from the forthcoming presentations that various training courses were organised for national and local experts);
- to transfer knowledge from developed countries, and relevant international organisations to the national and local institutions; and
- to create conditions for responding to some accidental situations.

CAMP is the MAP programme with the objective to develop planning and management strategies for a sustainable development of Mediterranean coastal and marine resources. As such, the Programme promotes and supports national coastal management initiatives in building relevant institutional and human capacities.

The Programme provides, and it has been doing so in Egypt, to all MAP Regional Activity Centres (RACs) and MEDPOL the opportunity of a harmonised joint practical work with the host country national and local authorities, institutions and scientific community, demonstrating the capacity for integration and application of the best methodologies and tools in real conditions.

According to the Agreement between the Egyptian Government and MAP, signed at the end of 1992, MAP agreed to implement the Project in order to tackle major problems and issues in the Fuka-Matrouh area. It was important that the proposed study area with its problems and concerns be representative of the wider Mediterranean coastal region of Egypt. The main problems and issues include:

- Uncontrolled development of tourism (intended for the domestic market as summer houses) which mostly excludes the local population as beneficiaries while producing negative impacts on the natural environment and infrastructure.
- Complex natural conditions that require sensible agricultural policies, whose main beneficiaries should be the native population, Bedouins.
- Ecologically and environmentally sensitive areas, as well as valuable cultural heritage.
- Absence of an effective land-use planning and development control system, as well as a participatory approach in overall development planning.
- Lack of environmental awareness.

Accordingly, a long-term objective of the Project was setting up of a system of integrated planning and management of resources in the area, as well as to support efforts towards the development of a national coastal management programme. The immediate objective of the Project was to provide solutions to development and environment problems of the most urgent nature which could be implemented in short period.

As a matter of fact, during the Project implementation, the Framework Integrated Coastal Zone Management (ICZM) Programme for Egypt was prepared in 1996. It defined the basic institutional and legal arrangements, and the Fuka-Matrouh Project fits into that framework. The communication between the Fuka-Matrouh Project and the on-going national Coastal Zone Programme was made easy by the fact that the EEAA was in charge of co-ordinating both the overall national activities of the national and local teams working on the Fuka-Matrouh Project.

The Project was composed of two groups of activities: those primarily sectoral, focused on individual topics or issues which mostly make the analytical part of the planning process, and the activities which integrate the information and knowledge gained in the analytical phase in outputs, such as Carrying Capacity Assessment (CCA), ICAM Planning Study, and Strategic Environmental Assessment (SEA).

The first group produced as comprehensive, precise and value-free information as possible to support decision and policy making in the second stage of the planning process. The second phase of the planning process synthesised the collected information and produced an integrated physical development strategy at a regional level (ICAM Planning Study), and formulated a management strategy including legal and institutional aspects, as well as action plans.

With regard to the individual activities, some of them brought in innovative methodologies and tools that proved to be useful and applicable, such as:

- assessment of land resources – characterised by holistic approach and methodology that combined high-tech remote sensing technologies with field surveys and laboratory work to produce valuable and cost-effective information,
- strategic environmental assessment (SEA) – an important issue in case of the coastal development of the Fuka-Matrouh area was the need to ensure tools to assess not only the individual project impacts within the usually very limited geographic area, but also whole development programmes or plans covering wider coastal segments (i.e. additive impacts of tourist villages in the whole Fuka-Matrouh coastal strip).

The Integrated Coastal Area Management (ICAM) Planning Study is the main output of the Fuka-Matrouh CAMP project that synthesised all the knowledge and recommendations gained by individual activities and sectoral studies. The development concept proposed in this Study and shown only within the study area boundaries is the result of the consideration of the wider regional and national context. This concept envisages the creation of an important development pole in the western coastal region. Instead of individual tourist resort projects sneaking into the coast and silently using it up, mostly excluding the local population as beneficiaries, the proposed concept aims at a comprehensive development of the western coastal region. This regional development concept has the following main objectives:

- to support the national policies, such as a population decentralisation from the overpopulated Nile valley, and equitable distribution of international tourist

plans based on the knowledge of the real capability of the area.

To achieve this aim, the MAP intervention, through its Centre for Remote Sensing (ERS/RAC), was based on a multidisciplinary approach integrating remotely sensed data, direct *in situ* measurements and book and cartographic material.

Capacity-building and training-on-the-job of local experts was also carefully performed as a main priority of this multidisciplinary intervention.

The main outputs were a Land system Map produced relying on commercial GIS software facilities and a Landsat Image of the concerned area, used for the carried-out work and transferred to the Egyptian counterpart.

The activity was also aimed at providing the Egyptian authorities with proper methods and effective systems to support decision-making processes for the sound planning and sustainable development of coastal areas.

As an outcome of this co-operation with Egyptian scientists and institutions, some recommendations to local authorities were jointly made, highlighting that management and equilibrating land between agriculture and development is one of the most serious land planning issues in the years to come.

In this connection, the following considerations were also made:

- portions of land could be reallocated to grazing without significant losses in agricultural production; especially in southern inland areas. However, if these surfaces would be negligible for agriculture, they would also be negligible for grazing, that works on a much larger scale;
- the improvement of pastures, by introducing new species able to grant a better cover and to reduce soil erosion, should be carefully balanced against the risk of reducing contributions of runoff water to downstream croplands. This balance can be considered at a watershed level in the coastal lowlands, while, unfortunately, this is not possible in the Plateau, where a realistic reconstruction of watershed borders was not allowed;
- preservation of backshore saltmarshes would imply limitations to agricultural water management in the watershed upstream from the marshes themselves, so creating a conflict.

A further recommendation was that the experience gained in the CAMP area should be extended to other Egyptian coastal areas experiencing similar environmental issues and development plans.

On the whole, all of the Mediterranean bordering countries could benefit by using the applied methodologies and tools for a better knowledge and understanding of the environmental state and of those actions to be implemented for keeping a sound environmental balance in coastal areas.

As a follow-up to its interventions in the CAMP area, the MAP-ERS/RAC, in the framework of its capacity building activities addressed to the Mediterranean countries, arranged a "National Forum on Support of Remote Sensing Techniques to Planning and Decision Making Processes for Sustainable Development in Egypt" with the co-operation of the Egyptian Environmental Affairs Agency (EEAA) and of the National Authority for Remote Sensing and Space Sciences (NARSS).

As a result of the "Forum" initiative, it was possible to identify clear guidelines for conceiving new joint undertakings based on the use of advanced technologies and aimed at setting up suitable information systems supporting planning and decision-making activities.

Another important activity was related to the protection of the ecosystems and species in the Fuka-Matrouh area, with the objectives to: (i) collect data on ecosystems and species (marine and terrestrial);(ii) identify sites of natural and cultural interest and to propose measures for their conservation and management; (iii) to assess the status of rare and/or endangered species; and (iv) to promote the training of local experts in habitat surveying techniques and management.

In carrying out these activities, the MAP Centre for Specially Protected Areas (RAC/SPA) obtained an important participation of local experts (from NIOF and the Alexandria University) jointly identified with the EEAA.

The studies revealed that present knowledge on marine ecosystems in the project area was low, but the available data show that the main Mediterranean habitats, assemblages and species are represented. Considering the scope and the budget of the CAMP project, it was not possible to undertake detailed field study and mapping of marine habitats. A detailed programme for data collection through surveys at sea was elaborated and is proposed as a follow-up activity of the CAMP project.

Like for the western Mediterranean coastal of Egypt, fishing is not developed in the project area, but potential is high. However, it was recommended that the future development of the fishing sector should not be developed in separation, without due consideration of the conservation of sensitive marine habitat. Special attention should be paid to the *Posidoina* meadows which are among the main components of marine biodiversity in the area. The need of *Posidoina* meadow conservation comes not only from the ecological viewpoint, indeed the habitat built by the species is essential for the growing of several species including those targeted by fishermen. Therefore, conservation of such habitat will provide significant contribution to the sustainability of the fishing sector itself.

As far as terrestrial ecosystems are concerned, the study confirmed that the region is characterised by considerable diversity of habitat and land-use. Some habitats are characterised by greater diversity in microhabitats than others due to the heterogeneity of landform, and, accordingly, exhibit greater diversity of plant species with several endemic species. Overgrazing and inappropriate cultivation practices appear as the main, but not the unique, causes of degradation. The study carried out within the framework of the CAMP project proposes the following main recommendations to face the loss of terrestrial habitats and species erosion:

- Establish pilot areas for protection and controlled grazing in each of the main habitats and communities;
- Initiate appropriate systems for grazing management involving the land-users and local authorities;
- Develop an extensive programme for propagation of endangered plant species;
- Establish and manage nature reserves to protect the habitats which are representative of the region. A simple abandonment to facilitate regeneration would only lead to further degradation.

It is essential to obtain the participation of local land-users in the implementation of the above mentioned recommendations.

There is only one protected area in the Mediterranean coastal zone of Egypt, between Alexandria and the Libyan border (El Omayed nature reserve, established in 1986). The CAMP project identified several sites of natural interest which should be granted a protection status (or at least some of them) under law 4/1994. Based on the local experience, gained in the management of the El Omayed nature reserve and the marine parks south of Sinaï, the development of protected areas on the western Mediterranean

coastal zone of Egypt will contribute in the sustainable development of the area. It will be difficult to reach a balanced situation between tourism development and conservation of habitats and landscapes along this coast of Egypt. However, in the CAMP project area there are actual opportunities for that. This is the case of Ras El-Hekma area identified as site of high interest from ecological and landscape viewpoint. The first presentation meeting on the CAMP Fuka-Matrouh project, held in Matrouh in 1995, recommended the establishment of a protected area on the site which is also designated for tourism development by the Ministry of Tourism. The investigations undertaken within the CAMP project show that part of it could be preserved as nature reserve and protected landscape while the other part will be used for tourism facilities. A buffer zone with traditional agriculture could be added to the core area on the terrestrial part of the site. The length of the coastline proposed for conservation is about 10-15 km.

I do not want to continue further on this introductory statement, the outputs of the project will be presented in the course of today and tomorrow. However, it is also envisaged that two or three important activities need to be followed up through adequate financial support of relevant international financial institution or programmes.

During this meeting you will hear in more detail on the progress achieved and problems encountered in each of the activities of the project through the various presentations by my colleagues from the MAP system and from the national and local experts and consultants. In this occasion, allow me to extend my thanks and appreciation to all of them for their dedication and co-operation.

By the end of these two days we envisage to consider few preliminary recommendations to be submitted to the Egyptian side.

Concluding this introductory statement, I would like to emphasise that two important environmental events are being taking place these days. The first was the World Environment Day on the 5th of June, and the second is the Mediterranean Environmental Week from 5 to 12 June 1999.

As stated by the UN Secretary-general in his World Environment Day message "The theme for this year's World Environment Day – Our Earth – Our Future – Just Save It, is an urgent appeal to each and everyone of us to renew our pledge to cherish and respect the planet that sustains us".

Moreover, the words of the Executive Director of UNEP, Mr. Klaus Toepfer, on this occasion closely reflect what we are doing within the Fuka-Matrouh CAMP project, when he said that "On this World Environment Day, I would like to call on every sector of society – governments and non-governmental organisations, individuals and community groups, business and industry, faith communities and civil society at large – to take those adequate steps, because it is at the local and national level where action to protect the environment acquires its full meaning. Participation at the community level is a precondition for promoting and achieving global results".

Finally, I would like to thank you once again for your participation and your kind attention.

ANNEX VI

Recommendations of the Conference

Prepare ICAM regional plan with special reference to the designation of protected areas and other preserved open coastal spaces, designation of land for agriculture, and reservation of areas for tourism within the carrying capacity.

Establishment of an environmental information centre to collect data from available sources and generate policy oriented information.

Upgrade the capacity of the local environmental management authority to collect and update data including remote sensing and GIS, and other tools.

Disseminate approaches, results and experiences gained within the Project to national and international stakeholders.

Carry out detailed survey of regional marine environment, prepare a detailed, mapped resource inventory, and prepare proposal and a management plan for Ras El Hekma protected area which would be included in the network of Egyptian Mediterranean protected areas.

Carry out public awareness raising projects at community level with regard to naturally sensitive areas.

LIST OF PROJECT OUTPUTS

1. Eid, El Mohamady; Misak, Raafat: Report on the Existing Documents of the Fuka and Siwa Areas - Egypt, Cairo, August 1990 (PAP/RAC)
2. Eid, El Mohamady: Integrated Planning and Management of Fuka Area (Egypt), Cairo, 1990 (PAP/RAC)
3. Draft CAMP Project for Fuka-Matrouh Area (Egypt), Athens, 1992 (MAP)
4. Agreement Relative to the Coastal Area Management Programme for the Coastal Area of Fuka Matrouh (Egypt), Athens, October 1992 (MAP)
5. Marine and Coastal Environment - Questionnaire, Split, March 1993 (PAP/RAC)
6. Ferrari, Giovanni: Proposal for the Study of Soil Erosion and Desertification in the Management Programme for the Coastal Area of Fuka-Matrouh (Egypt), Florence, April 1993 (PAP/RAC)
7. Beltagy, Ali Ibrahim: The Marine Ecosystems of Fuka-Matrouh Area (Egypt) – Status of Species and Habitats, Tunis, 1993 (SPA/RAC)
8. Kasperek, Max: Marine Turtle Conservation in the Mediterranean – Marine Turtles in Egypt – Phase I: Survey of the Mediterranean Coast between Alexandria and El-Salum, Tunis, 1993 (SPA/RAC)
9. Ayyad, Mohamed Abdel-Gawad: The Terrestrial Ecosystems of Fuka-Matrouh Area (Egypt): Status – Protection and Measurement Measures, Tunis, 1993 (SPA/RAC)
10. Fawzi, Mohamed *et al.*: Up-Dated On-Site Report for the Fuka-Matrouh Area, Egypt, Cairo, November 1993 (PAP/RAC)
11. Report of the Workshop on Geographical Information Systems in Integrated Coastal Area Management (Alexandria, November 13-18, 1993), Split, November 1993 (PAP/RAC)
12. El Guindi, Mohamed Abdel Aziz; El Din Zulfikar, Mona Salah: A Legal Study of Environmental Legislations Relating to the Fuka Matrouh Area Project, 1994
13. Report of the Training Course on Soil Survey and Aerial Photo Interpretation (Marsa Matrouh, March 11-25, 1995), Split, March 1995 (PAP/RAC)
14. Esmael, Feisal A.: Cultural Heritage Sites of the North-Western Coast of Egypt, Tunis, 1995 (SPA/RAC)
15. Aruoba, Celik: Systemic and Prospective Analysis for an Environmentally Friendly Management, 1995 (BP/RAC)
16. Ayyad, Mohamed A.: A Framework for Accumulating Consequential Data and Knowledge, Alexandria, 1995 (BP/RAC)
17. Implications of Climatic Changes on the Coastal Area of Fuka-Matrouh - Draft, Athens, 1995 (MAP)
18. Land Based Sources of Pollution in Matrouh-Fuka Area, National Institute of Oceanography and Fisheries, Alexandria, 1995 (MEDPOL)
19. Assessment of Land Resources Supported by Remote Sensing, Palermo, September 1995 (RAC/ERS)
20. Abdel-Kader, Fawzi, *et al.*: Soil Degradation and Desertification – Final Report, January 1996 (PAP/RAC)
21. El-Raey, Mohamed, *et al.*: Inventory GIS Database and Sustainability Analysis of Fuka-Matrouh Area (Egypt), Alexandria, December 1997 (PAP/RAC)

22. El-Raey, Mohamed, et al.: A Framework for Integrated Coastal Area Management Plan of Fuka-Matrouh Area (Egypt), Alexandria, June 1998 (PAP/RAC)
23. El-Raey, Mohamed, Fawzi Mohamed, et al.: Strategic Environmental Assessment of the Integrated Coastal Area Management Plan of the Fuka-Matrouh Area (Egypt), Alexandria, December 1998 (PAP/RAC)
24. Integrated Coastal Area Management Planning Study for Fuka-Matrouh Area, April 1999 (PAP/RAC)
25. Carrying Capacity Assessment for Tourism Development in Fuka-Matrouh Area, June 1999 (PAP/RAC)
26. Assessment of Natural Resources and Soil Conservation Issues in the Coastal Area of Fuka-Matrouh, June 1999 (PAP/RAC – ERS/RAC)
27. Final Integrated Report of the Coastal Area Management Programme "Fuka-Matrouh – Egypt", June 1999 (PAP/RAC)
28. Report of the Final Presentation Conference for the CAMP "Fuka-Matrouh" (Cairo, June 8-9, 1999), August 1999 (PAP/RAC)
29. Eid, El Mohamady; Misak, Raafat: Report on the Existing Documents of the Fuka and Siwa Areas - Egypt, Cairo, August 1990 (PAP/RAC)
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51. El-Raey, Mohamed, Fawzi Mohamed, et al.: Strategic Environmental Assessment of the Integrated Coastal Area Management Plan of the Fuka-Matrouh Area (Egypt), Alexandria, December 1998 (PAP/RAC)
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ANNEX I

**INTEGRATED COASTAL AREA
MANAGEMENT PLANNING STUDY**