



**United Nations
Environment
Programme**

EP



MEDITERRANEAN ACTION PLAN

**AGREEMENT RELATIVE TO THE
COASTAL AREA MANAGEMENT PROGRAMME
– THE PROJECT FOR LEBANON**

January 2001

Co-ordinating Unit for the Mediterranean Action Plan

MEDITERRANEAN ACTION PLAN

**AGREEMENT RELATIVE TO THE COASTAL AREA MANAGEMENT PROGRAMME –
THE PROJECT FOR LEBANON**

BETWEEN

**THE GOVERNMENT OF
LEBANON,**

as Contracting Party to the Convention for
the Protection of the Mediterranean Sea
against Pollution and its related Protocols

and

**THE UNITED NATIONS
ENVIRONMENT PROGRAMME,**

as secretariat to the Convention for the
Protection of the Mediterranean Sea
against Pollution and its related Protocols

in conformity with the legal obligations of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its related Protocols, following the programmes of action agreed on in MAP Phase II and based on recommendations made at various intergovernmental and expert meetings during which the Coastal Area Management Programme (CAMP) the project for Lebanon was approved, and the Tenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention (Barcelona, 1995) at which the CAMP Project for Lebanon was accepted, agree on the following:

- a) The Parties to the present Agreement undertake to develop and implement the CAMP Project for Lebanon, set forth in the relevant Terms of Reference enclosed in the Annex to this Agreement and making an integral part of it.
- b) The description of the CAMP Project for Lebanon as set forth in the Annex to this Agreement, may be reviewed or amended by mutual consent of the Parties to this Agreement.
- c) The Agreement covers a period from the date of signature until end November 2003 and in addition for the implementation of post project activities until end December 2005. The Agreement may be extended or terminated earlier by mutual consent of the Parties to this Agreement.
- d) The development, implementation and the post project activities will be implemented within the following basic institutional arrangement:
 - The Government of Lebanon will be represented by the Ministry of the Environment, which will be responsible for the establishment of the national part of the Project institutional arrangement as defined in the Annex to this Agreement; and
 - The United Nations Environment Programme will be represented by the Co-ordinating Unit of the Mediterranean Action Plan (MED Unit) in the role of general co-ordinator of the Project, and the Priority Actions Programme Regional Activity Centre as the MAP Project implementing Centre, to be responsible for the establishment of the MAP component of Project institutional arrangements.
- e) The role of the parties and the obligations during the a) preparatory stage of the Project, b) its implementation stage, c) the activities to be undertaken after the completion of the Project (post Project activities), and d) budget and cost sharing, will be fulfilled and implemented as defined in the Annex to this Agreement.

For and on behalf of

THE GOVERNMENT OF LEBANON

**THE UNITED NATIONS ENVIRONMENT
PROGRAMME**

Name:
(.....)

Name:
(.....)

Title:

Title:

Date:

Date:

**ANNEX TO AGREEMENT
RELATIVE TO
THE COASTAL AREA MANAGEMENT PROGRAMME
– THE PROJECT FOR LEBANON**

PROJECT TERMS OF REFERENCE

TABLE OF CONTENTS

LIST OF ACRONYMS.....	2
LIST OF FIGURES.....	2
SUMMARY	3
1. INTRODUCTION	5
1.1. Preparatory activities implemented.....	5
1.2. Justification for the CAMP project and conceptual framework.....	6
1.2.1. The triggering factors.....	6
1.2.2. The CAMP project for Lebanon conceptual framework.....	7
1.3. Identification of opportunities for CAMP project activities.....	8
2. BASIC ELEMENTS OF THE PROJECT	12
2.1. The project area.....	12
2.2. Project objectives, goals and strategy.....	12
2.3. The Project structure.....	14
2.4. Phasing of the Project.....	15
2.5. Project Outputs.....	17
2.6. Project institutional structure.....	18
3. SUMMARY OF THE PROJECT ACTIVITIES	23
3.1. ACTIVITIES AT THE PROJECT LEVEL.....	23
3.1.1. Activity: Co-ordination and Integration of Project Activities.....	23
3.1.2. Activity: Data and Information Management.....	25
3.1.3. Activity: Participatory Programme.....	27
3.1.4. Activity: Systemic Sustainability Analysis.....	28
3.2. INDIVIDUAL ACTIVITIES	30
3.2.1. Activity: Integrated Coastal Area Management.....	30
3.2.2. Activity: Urban Management and Sustainable Development.....	32
3.2.3. Activity: Marine Conservation Areas.....	34
3.2.4. Activity: Integrated Water Resource Management.....	35
3.2.5. Activity: Tourism and Sustainable Development.....	36
4. WORKPLAN, TIMETABLE, BUDGET AND COST-SHARING	37
4.1. Workplan and Timetable.....	37
4.2. Budget and cost-sharing.....	37
4.3. Institutions involved.....	40
5. ACHIEVEMENT INDICATORS	41
5.1. Progress achievement indicators.....	41
5.2. Project achievement indicators.....	42
6. PROGRESS REPORTING	43
7. POST PROJECT ACTIVITIES	44
7.1. Follow-up activities.....	44
7.2. Monitoring, evaluation and reporting.....	44
7.3. Use of results at MAP level.....	45

LIST OF ACRONYMS

ACS:	National Bureau of Statistics of Lebanon
APM:	100 Mediterranean Historic Sites
BP/RAC:	Blue Plan Regional Activity Centre
CAMP:	Coastal Area Management Programme
CZ:	Coastal Zone
DGUP:	Directorate General for Urban Planning - Ministry of Public Works
ERS/RAC:	Regional Activity Centre for Environment Remote Sensing
GEF:	Global Environment Facility
GIS:	Geographic Information System
ICAM:	Integrated Coastal and Marine Areas Management
IWRM:	Integrated Water Resource Management
LEDO:	Lebanese Environment and Development Observatory
LEF:	Lebanon Environment Forum
MAP:	Mediterranean Action Plan
MCSD:	Mediterranean Commission for Sustainable Development
MED Agenda 21:	Agenda 21 for the Mediterranean Region
MEDU:	MAP Co-ordinating Unit
MoA:	Ministry of Agriculture
MoE:	Ministry of the Environment (Lebanon)
MoHER:	Ministry of Hydraulic and Electrical Resources
MoT:	Ministry of Transport
NCSR:	National Council for Scientific Research
NGO:	Non Governmental Organisation
PAP/RAC:	Regional Activity Centre for Priority Actions Programme
RAC:	Regional Activity Centre
SC:	Steering Committee
SEA:	Strategic Environmental Assessment
SPA:	Specially Protected Areas
SPA/RAC:	Regional Activity Centre for Specially Protected Areas
TOR:	Terms of References
UNEP:	United Nations Environment Programme
UNEP-GRID:	United Nations Environment Programme – Global Resources Information Database
WRMP:	Water Resource Management Plan

LIST OF FIGURES

Figure 1: The Project structure	14
Figure 2: Phasing of the Project.....	16
Figure 3: Institutional arrangement at project level.....	19

SUMMARY

The document presents the contents and structure of, and the activities to be implemented within the Coastal Area Management Programme (CAMP) – the Project for Lebanon. The duration of the project is envisaged for the March 2001 – November 2003 period and the implementation of post Project activities in the December 2003 – December 2005 period.

The project will be implemented by the Mediterranean Action Plan (MAP), with the Co-ordinating Unit of MAP as the project co-ordinating authority and the Priority Actions Programme Regional Activity Centre (PAP/RAC) as the project implementing Centre. The Blue Plan Regional Activity Centre (BP/RAC), the Regional Activity Centre for Specially Protected Areas (SPA/RAC), and the Regional Activity Centre for the Environment Remote Sensing (ERS/RAC), will be involved implementing individual Project activities within their mandates.

The project will be implemented in accordance with the conclusions of the Tenth Ordinary Meeting of the Contracting Parties to the Barcelona Convention, held in Barcelona in 1995, in close co-operation and with the support of Lebanese authorities.

The project has been conceived in response to the priorities expressed by the Ministry of the Environment, which were presented in the 1999 Feasibility Study. Various proposals for individual activities were submitted to PAC/RAC through the Ministry of the Environment, in accordance with the MAP Phase II and MED Agenda 21, and within the conceptual and institutional framework of CAMP. The project structure and contents were formulated after consultations with the national authorities and institutions, the Co-ordinating Unit of MAP, and the Regional Activity Centres (RACs) of MAP.

The project is oriented towards sustainable management of the coastal and marine areas of Lebanon, and in particular of its Southern area, introducing and applying principles, methodologies and practices of sustainable development and Integrated Coastal and Marine Areas Management (ICAM) through pilot activities in selected municipality areas.

The basic project structure is as follows:

- I. Co-ordination and functional activities:
 - Co-ordination and Integration of Project Activities;
 - Data and Information Management;
 - Systemic Sustainability Analysis; and
 - Participatory Programme.
- II. Individual Project activities:
 - Integrated Coastal Area Management;
 - Urban Management and Sustainable Development
 - Marine Conservation Areas;
 - Integrated Water Resource Management; and
 - Tourism and Sustainable Development.
- III. Integration of results, including the preparation of the following:
 - Final Integrated Project Document;
 - Follow-up Proposals;
 - Urgent Investment Portfolio; and
 - Presentation of the results, to be implemented within the component I above.
- IV. Post Project activities:
 - Formulation and implementation of follow-up activities at the national and South Lebanon levels;
 - Monitoring, evaluation and reporting at the host-country level; and
 - Use of results at the MAP level.

Institutions responsible for the implementation and follow up of the project are: the Ministry of Environment, in the role of National Lead Agency, the Co-ordinating Unit of MAP as overall co-ordinator, and PAP/RAC as the MAP Project Implementing Centre.

The funds for the project implementation will amount to 503.000 US\$, out of which:

(000 US\$)

	Cash	In Kind	Total
MAP	381	-	381
Host country	64	40	104
Others (LEDO)	6	12	18
TOTAL	451	52	503

Due to the fact that the large part of national consultants to be involved in the project are staff of national institutions and Government departments, the predominant part of the host country contribution in kind is related to their involvement in the project as part of their regular duties.

A detailed specification concerning their involvement will be made within the Technical Specification for each individual activity.

It is understood that the envisaged host country counterpart in kind might be subject to amendments after the preparation of the Inception Report and of the Technical Specifications for individual activities.

1. INTRODUCTION

1.1. PREPARATORY ACTIVITIES IMPLEMENTED

Prior to the signature of the Project Agreement, the following preparatory activities were implemented:

- The decision to implement a CAMP project for Lebanon was adopted at the Meeting of the Contracting parties to the Barcelona Convention held in Barcelona in 1995 following a request presented by the Government of Lebanon;
- Creation of the prerequisites to start the preparations to implement that decision took place in 1999. In March 1999, a MAP mission visited Lebanon. MAP Deputy Co-ordinator and PAP Director held talks with the most important stakeholders to start implementing the above decision.
- Following from that mission, a Feasibility Study for CAMP project for Lebanon was commissioned from a national expert. The objective of the Feasibility Study was to address the requirements for CAMP implementation under the prevailing institutional and professional conditions in Lebanon, and to assess the possibilities for a successful CAMP implementation.
- The second MAP mission to Lebanon was undertaken in late September 1999. The first draft of the Feasibility Study was discussed and comments were given for its finalisation. The Study was completed in December 1999.
- In December 1999, PAP/RAC engaged an international and a national expert to prepare the Terms of Reference for CAMP project for Lebanon. In their work they were instructed to follow the established procedure and format for MAP CAMP TOR preparation.
- An international PAP/RAC consultant visited Lebanon on two occasions (late January and early March 2000). He held, together with the national expert, extensive talks with national authorities and institutions expected to participate in the project implementation. The first draft of the project TOR was completed in April 2000. The draft TOR were sent, in a slightly revised form, to the Ministry of the Environment for comments.
- A MAP mission visited Lebanon on 1-2 June 2000 with the objective to meet national authorities in order to: discuss the project TOR, make a final decision on the activities to be realised in the project, make a list of major actors and their roles in project implementation, and discuss the institutional arrangements, financing and timetable. The meeting was held in the premises of the Ministry of the Environment (MoE). The new situation resulting from the withdrawal of Israel from the southern part of South Lebanon, being a recent event and therefore not reflected in the first draft of TOR, was also discussed. MoE representatives stressed the great importance of this event for Lebanon as a whole and concluded that it offered a whole range of new opportunities for the extension of the project activities into that area of South Lebanon. They particularly emphasised the expected new population dynamics (return of the population and immigration), as well as the emergence of new development pressures, likely to give rise to accelerated urban growth and tourism development in the South of Lebanon. Associated with these opportunities, the new situation could also create some negative effects that could hinder sustainable development of the coastal region. It would be necessary that the activities within the Lebanon project adequately respond to

these challenges. These activities will have to be clearly identified in the project programme, from both, geographical and thematic viewpoint. It was, therefore, concluded that the geographical coverage of the project area should be extended further south up to the Lebanese border with Israel, with Naqoura as the specific pilot site. The participants further discussed the draft proposal for individual activities to be implemented within the project for Lebanon. They adopted the proposal with two additions: tourism as a separate thematic activity, and the area of Naqoura as a new site where some specific activities will be implemented.

- After the June meeting, PAP/RAC held consultations with respective MAP components related to their involvement in and contribution to the project, resulting with some amendments to the previously discussed project structure.

1.2. JUSTIFICATION FOR THE CAMP LEBANON PROJECT AND THE CONCEPTUAL FRAMEWORK

Based on the studies that were covered by other projects, the discussions held with the various stakeholders, and most of all, taking into consideration the evolution of the geopolitical situation that is currently occurring in the region, it appears of primary importance to orient and establish a sustainable management programme within the area that is located south of Beirut. The selected area doesn't appear, at the first glance, to be in urgent need of intervention, compared to other areas along the coast. However, an intervention at this moment would have a great benefit, especially when numerous environmental problems are exerting an increased pressure on the municipalities that are seeking all available human, financial and technical resources.

1.2.1. The triggering factors

Important "triggering factors", highlighting the existing pressures, future coastal protection and resource management needs, include the following:

- Lack of comprehensive integrated coastal zone management plans and legislation;
- Fragmented and overlapping responsibilities;
- Outdated legal and regulatory framework;
- Civil Service staff limitations;
- Sprawl of industrial development outside designated industrial zones;
- Encroachment of tourist and urban development on agricultural land;
- Lack of integrated agricultural policy;
- Land and woodland degradation;
- Sea water pollution from discharge of untreated domestic and industrial wastewater;
- Freshwater pollution risks and public health hazards from open solid waste dump sites;
- Air pollution in and around the main urban centres;
- Diffuse sector-focused external assistance project initiatives; and
- Need of technical assistance and capacity building.

In response to the above, the CAMP project for Lebanon will implement project activities aiming to develop, apply and demonstrate methods, concepts and tools to address the existing and future coastal management problems. The proposed project activities will also take into account national, regional and local environment-development concerns including the following:

- Need for a comprehensive and systemic contribution to formulation, adoption and implementation of strategies for sustainable development of the national coastal area by applying an integrated approach;

- consideration of Lebanon's economic and social transition, and the environmental implications of the reconstruction of South Lebanon;
- Need for the integration of South Lebanon's rich human and physical resource endowment and the protection, management and development of coastal resources;
- Need for providing a spatial and thematic focus to guide sector-specific environmental and development initiatives in the region;
- Improvement of local-level environmental awareness and participation;
- Incorporation of environmental quality objectives in development policy; and
- Appraisal of socio-economic benefits accruing from sustainable coastal management for justifying increased coastal protection investment.

Lebanese coastal area is an area of precious cultural (historical, archaeological,...) and natural value. The geomorphologic evolution of the western Mediterranean coast caused that the coastal constructions built up along the centuries can be found in the marine area too. The environment of these coastal regions is strongly endangered by urban expansion, industrial and commercial activities.

The conservation of built-up and non built-up areas relies on the adequate legislation and its implementation, on the knowledge of the existing remains of the numerous civilisations which followed each other, and on the physical planning and management.

The need to address the above problems within an Integrated Coastal Area Management methodological framework is shared and adopted by all key CAMP project stakeholders, primarily:

- The Ministry of the Environment;
- The Municipalities of Damour, Sarafand and Naqoura, and
- MAP, PAP/RAC and other Regional Activity Centres involved in the project implementation.

1.2.2. The CAMP project for Lebanon conceptual framework

The design of CAMP project for Lebanon recognises and incorporates the following fundamental considerations:

- The CAMP Project for Lebanon is "country-driven": This emphasises that the project is designed to respond to national and South Lebanon priorities, will operate according to the experiences and realities of the Lebanese legal, administrative and cultural institutions, and will utilise the available national and local expertise. MAP technical assistance will be targeted to issues in which national expertise and resources require support and supplementary inputs.
- The CAMP Lebanon project is based on an integrated approach to coastal environment and development problems: This emphasises that project activities will cut across protection and development problems, harmonise public sector priorities and private sector pressures, and provide an integrated strategy for the common goal of achieving reconstruction in South Lebanon within a sustainable management policy framework.

Consequently, the CAMP Lebanon project, far from compromising development objectives, aims to incorporate the principles of sustainable development and integrated coastal management in the transition process to better articulate resource protection and development objectives, particularly employment and income generation.

1.3. IDENTIFICATION OF OPPORTUNITIES FOR CAMP LEBANON PROJECT ACTIVITIES

The Project Levels

Taking into account the objectives of the MAP CAMP as a regional MAP programme and those of the CAMP project for Lebanon, the conceptual approach to project formulation and structure is aimed to the 3 basic levels:

- a) the national coastal area level - related to findings, results and recommendations targeted at the national level (MoE, other ministries) related to the institutional, legislative and management issues, to the application of tools and techniques, and to the national coastal area management strategy;
- b) the level of the South Lebanon coastal area - in view of the need for a sustainable coastal management strategy, development and protection measures and recommendations for major sectoral activities; and
- c) selected pilot areas for detailed elaboration and implementation of selected methodologies, tools and techniques aiming at sustainable development and integrated coastal area management.

The project area is extended to Naqoura following the recent withdrawal of Israel from that part of South Lebanon. The detailed project area description and the detailed map will be provided in the Inception Report.

Within the broader geographical framework of the South Lebanon coastal area, the selected project activities are targeted at the pilot areas of the Municipalities of Damour, Sarafand and Naqoura, on the basis of criteria including, but not limited to, the following:

- a) presence of a major economic sector;
- b) secondary sector for linkages with the main sector;
- c) environmental problems;
- d) impacts of activities on the environment;
- e) status, capacity and degree of consensus of the Municipality; and
- f) public participation opportunities.

Damour is characterised by its strategic geographical location, being on the coast and at the beginning of the Chouf mountain area and the South of Lebanon. It is one of the first towns to suffer from massive displacement, with very few inhabitants yet to return. The major economical activity is agriculture, but the town suffers from severe water pollution coming from upstream areas. CAMP implementation is expected to have a very positive impact owing to the institutional capacity and incentives, and its richness in agricultural areas, forests, sandy beaches and marines resources; the location of Damour River which flows through many villages in the Chouf being an important asset.

Sarafand appeared to have very interesting characteristics on the level of the available natural and human resources. In addition, the historical importance of the settlement is a good incentive for the preservation and the management of this area. However, the severity of environmental problems, such as waste water discharges into the sea with no prior treatment, and the proximity of residences to these effluents discharge points and their health risks, and the hasty conservation of maritime public domains, are determining issues to prioritise Sarafand among the three selected municipalities. CAMP execution would have a positive impact owing to the availability of a good economic tool, namely the fishing sector.

Naqoura, after the recent withdrawal of Israel, offers a whole range of new opportunities, as well as associated threats, that warrant the extension of the project activities into that area of Lebanon. In particular, attention is drawn to the expected new population dynamics (return of the population and immigration) and the emergence of new development pressures likely to stimulate accelerated urban growth and tourism development, needs to which the Lebanon project will have to respond adequately.

The proposed three pilot areas, in addition to local environmental problems, present important opportunities for implementation of individual project activities addressing coastal environment pressures confronting most parts of South Lebanon. Implementation of pilot activities in selected areas will serve as a basis for defining coastal protection and management strategies, and implementation of tools of wider importance for the national and South Lebanon levels.

Particular problems of the pilot areas (such as sea and fresh water pollution risks, beach quality degradation, sprawl of conflicting coastal land uses, and public health risks) are shared with many other parts of South Lebanon, and reflect common coastal conflicts in other areas of Lebanon. Thus, implementation of pilot activities in these areas will demonstrate analytical tools and implementation methods applicable to the South Lebanon and national levels.

The following table provides justification for the selected pilot areas, and an overview of the opportunities for integrated overview of individual project activities and the associated cross-sectoral development objectives.

	Main Justification	Opportunities for project activities
D A M O U R	<ul style="list-style-type: none"> • Strategic location between coast and Chouf mountain. • Coastal settlement that suffered wartime population displacement, currently beginning to return. • Area designated “under study” by Directorate of Urban Planning (all development applications reviewed by High Council of Urban Planning pending preparation of new Plan). • Rich agricultural land under urbanisation pressures. • Damour river basin – upstream sources of potential coastal and water pollution from emerging activities in Chouf settlements. • Interdependence of agricultural, forests, surface and ground water coastal and marine resources. 	<ul style="list-style-type: none"> • Integrated actions (coastal and river basin management, agriculture, forests biodiversity, coastal and marine pollution protection management, and water quality monitoring). • Guidelines for hinterland development and job-creation opportunities (eco-tourism), and market-based incentives for environmental conservation. • Policies to stimulate and guide economic reactivation and investment initiatives of the diaspora population. • Development of sustainable coastal management plan for the area presently “under study”.
S A R A F A N D	<ul style="list-style-type: none"> • Historic town (close to Sour) • Wastewater discharge hazards • “Emergency” housing development on seafront • Fisheries activity • Emerging coastal tourism development • Agriculture • Housing relocation effort 	<ul style="list-style-type: none"> • Integrated actions (coastal planning, water resource management, tourism, and agriculture) • Sea and fresh water pollution protection and monitoring. • Fisheries development and support to community-based fishermen. • Coastal-hinterland land-use planning (relocation of coastal “emergency” housing)
N A Q O U R A	<ul style="list-style-type: none"> • Adjustments resulting from withdrawal of Israel • New population dynamics • New development pressures • Expected Impacts on coastal resources 	<ul style="list-style-type: none"> • Tourism development • Land use and agriculture • Marine protected areas • Data base management • Local participation and awareness

2. BASIC ELEMENTS OF THE PROJECT

2.1. THE PROJECT AREA

The project area of the CAMP Lebanon project is defined at three levels:

- a) the strategic level is the entire national coastal area;
- b) the implementation level is the coastal area of South Lebanon (from Khalde to Naqoura); and
- c) the pilot areas level are the Municipalities of Damour, Sarafand and Naqoura.

2.2. PROJECT OBJECTIVES, GOALS AND STRATEGY

The objectives of the project are defined in accordance with:

- Priority needs as presented in the project Feasibility Study; and
- General objectives of MAP and its Coastal Areas Management Programme.

The general objectives of the project are:

- to contribute to sustainable development and integrated coastal area management of the national coastal area;
- to strengthen environmental management institutions in Lebanon;
- to protect the coastal resources of South Lebanon by developing and applying concepts of sustainable development and methods and tools of Integrated Coastal and Marine Areas Management to the economic and social development activities of the area.

The immediate objectives of the project include the following:

- a) to identify and elaborate strategies, solutions, tools and actions contributing to sustainable development, environmental protection and rational utilisation of coastal and marine resources of Lebanon, focusing on South Lebanon;
- b) to apply methodologies, tools and practices of sustainable development, and of Integrated Coastal and Marine Areas Management;
- c) to contribute to the upgrading of national and local capacities for sustainable development, integrated coastal management and protection of the environment;
- d) to generate project results and experience to be used in defining and implementing post-project activities as envisaged by the Project Agreement; and
- e) to develop planning, management and implementation approaches at project area, regional and national levels, applicable to other areas.

The strategy of the project is based on the methodology of ICAM. The project will be implemented within the existing national legal and planning framework, using as basic inputs existing planning- and development-related documents, available information sources on natural resources, socio-economic conditions, problems, causes, sources and impacts of pollution.

The CAMP Lebanon project will be implemented by teams of national experts, guided and assisted, as the need arises, by MAP experts and professionals. The integration of project results will be made jointly by MAP and selected national experts. The results of the project will be presented to the national authorities in the form of user-friendly outputs providing justification for their application and use.

MAP Regional Activity Centres and MAP programmes with particular expertise will provide technical assistance to the project, including:

- Co-ordinating Unit for MAP (MEDU);
- Priority Actions Programme Regional Activity Centre (PAP/RAC);
- Blue Plan Regional Activity Centre (BP/RAC);
- Specially Protected Areas Regional Activity Centre (SPA/RAC);
- Environment Remote Sensing Regional Activity Centre (ERS/RAC); and
- 100 Mediterranean Historic Sites (APM).

In addition national teams implementing individual project activities will use as appropriate, recommendations and documentation prepared within hitherto MCSD activities. Administrative and technical support related to the use of MCSD documents will be provided by the responsible MEDU component.

The project team will establish linkages with on-going projects, like the Lebanese Environment Development Observatory (LEDO) Project. The project is currently operational at the Ministry of the Environment. It aims at filling the gaps in key environmental data, such as air and water pollution levels and industrial wastewater, and calculating the cost of environmental degradation. LEDO will act as a catalyst for the collection of data, and work with other ministries, agencies and academic institutions to agree on a limited number of environmental and development indicators of relevant importance to the sea and rivers of Lebanon.

In the initial phase of the project, a Diagnostic Analysis will be prepared, as well as drafts Technical Specifications for each individual activity, all to be presented, discussed, harmonised and adopted by an Inception Workshop. The workshop results will be presented by the Inception Report, to be used together with Technical Specifications as the basic project operational documents.

During the formulation and implementation phases of the project, a series of national workshops will be held in order to discuss project activities.

Harmonisation of individual project activities and of their results, and integration of the results within space, timing and activity-measures, will be secured throughout the implementation period, and in particular through the preparation of the Final Integrated Project Document.

To present the project results, a Presentation Conference is envisaged. In addition, the project will implement a participatory programme to involve local NGOs, professional and business organisations, the scientific community and interest groups.

The post-Project activities, emerging from the results of the project, will pursue follow-up actions and try to secure funding necessary for implementing key project outputs.

The phasing of project implementation will follow the approach incorporated in the ICAM methodology.

The cost of the project will be covered through cash contribution by MAP (through the contributions of the RACs involved), and by the host country cash and "in kind" contributions.

The allocation of MAP funds related to:

- a) partial compensation of national teams through contracts;

- b) expenses of MAP experts and consultants; and
 - c) other costs;
- will be agreed within the Aide-Memoire to be signed after the approval of the Inception Report and Technical Specifications.

Progress reporting by national teams to the National Project Co-ordinator and PAP/RAC in its role of MAP Project Co-ordinator, will be provided through regular half-yearly progress reports. In addition, at the project level, the National Project Co-ordinator and MAP Project Co-ordinator will present regular half-yearly progress reports to MAP and MoE.

2.3. PROJECT STRUCTURE

The project is structured in four segments:

- I. Co-ordination and Functional Activities
- II. Individual Project Activities
- III. Integration of Results
- IV. Post Project Activities

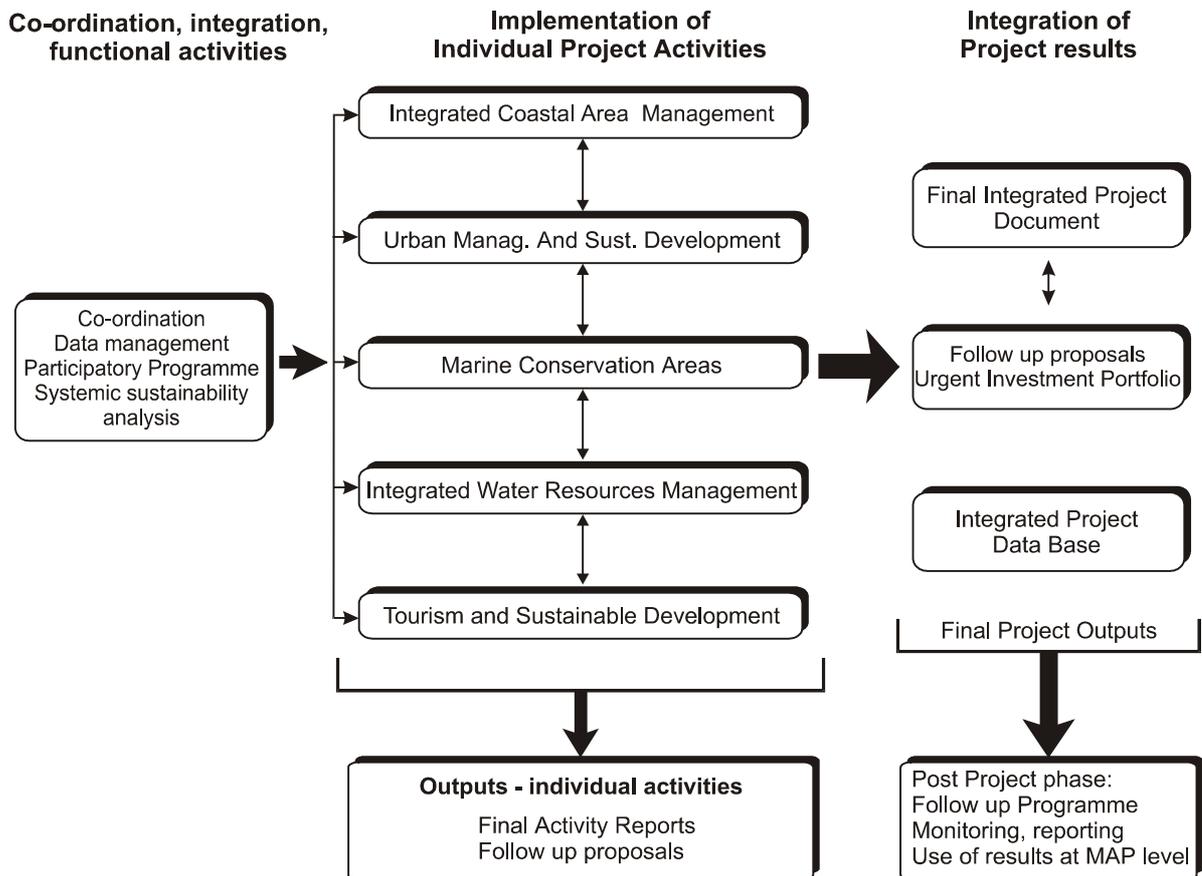


Figure 1: The project structure

2.4. PHASING OF THE PROJECT

Project phasing will follow the approach incorporated in the ICAM methodology:

Stage I: Initiation (implemented before the signing of the Agreement)

Stage II: Detailed formulation of the project:

- Initial data collection
- Meeting prerequisites for implementation
- Draft Technical Specifications
- Draft Inception Report
- Diagnostic Analysis
- Inception Workshop/Final Inception Report
- Defining the Participatory programme
- Approval to start the implementation stage.

Stage III. Implementation:

- Initial implementation activities, including preparation of the final version of the Technical Specifications for individual activities, signature of the Aide-Memoire;
- Implementation of individual activities;
- Integration of results, including the preparation of the final Project Report; and
- Presentation of the results.

Stage IV. Post Project Activities

- Formulation and implementation of follow-up activities;
- Monitoring and reporting, and
- Presentation and use of results at MAP level.

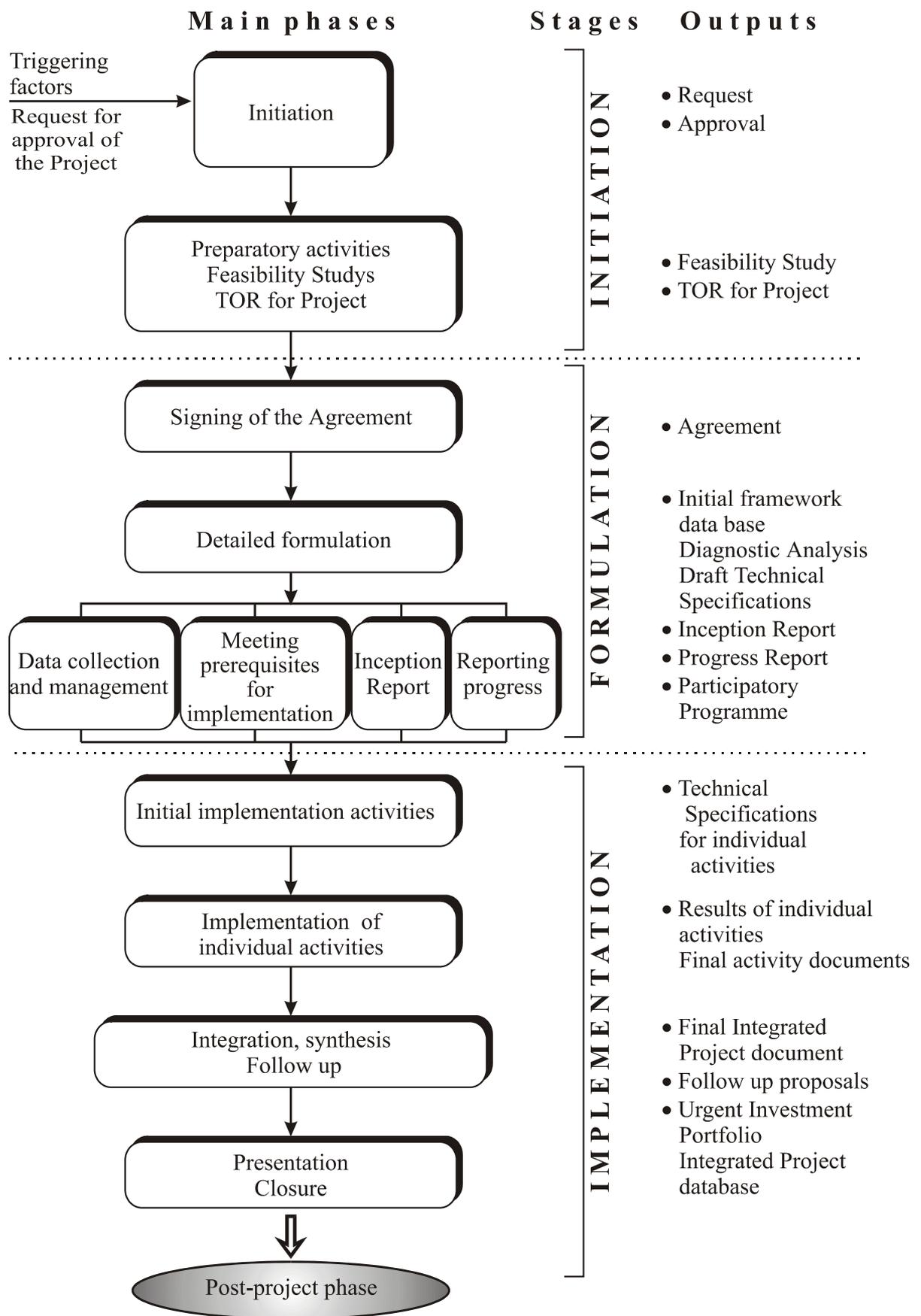


Figure 2: Phasing of the project

2.5. PROJECT OUTPUTS

The main outputs of the project will be the following:

a) Outputs at the National level

- Presentation Conference, Conference Documents and the Conference Report;
- Diagnostic analysis at the level of national coastal area, with particular reference to the South Lebanon coastal region;
- Inception Workshop and Inception Report;
- Capacity building: training on ICAM, GIS, Systemic Sustainability Analysis (SSA), participatory programme and on sectoral issues;
- SSA;
- Integrated Coastal Management Strategy and Recommendations;
- Final Integrated Project document, Proposals for Follow up and Urgent Investments Portfolio; and
- Project Terminal Report and Self Evaluation Fact Sheet (SEFS).

b) Outputs at level of South Lebanon coastal area

- Diagnostic analysis for the South Lebanon coastal area;
- Project Database and GIS;
- Capacity building: training on ICAM, GIS, SSA, participatory programme and on sectoral issues;
- Input documents, public consultations and feedback reports;
- Systemic Sustainability Analysis;
- Sustainability Indicators Set;
- Integrated Coastal Management Plan for the South Lebanon coastal area;
- Proposal of the ICAM Implementation Programme;
- Detailed urban management analysis;
- Urban management studies;
- Analysis of water resources availability and demand;
- Detailed tourism and sustainable development analysis; and
- Regional recommendations for land use and future development of tourism.

c) Outputs at the level of selected pilot areas

- Framework for municipal database;
- Planning and management documents for Damour, Sarafand and Naqoura;
- Recommendations for Strategic Environmental Assessment;
- Land use maps, change detection maps, future urban expansion maps;
- Urban Management Studies – pilot area level, including Local Agenda 21 document for Damour and Naqoura;
- Recommendations for establishment and management of SPA - pilot areas level;
- Inventory, analysis and evaluation of the surveyed marine conservation areas;
- Database, maps and visual records of the marine conservation areas;
- Recommendations for the integrated marine conservation areas management and protection;
- Carrying Capacity Assessments for Tourism for Damour and Naqoura.

d) Outputs at the level of each individual activity:

- Half-yearly Progress Reports;
- Technical Specifications;

- Mission Reports;
- Progress Reports;
- Training and Workshops reports;
- Final Project documents;
- Final Activity Report.

A detailed description of the above outputs will be elaborated in the Inception Report and the respective Technical Specifications, to be prepared after the signature of the Agreement.

2.6. PROJECT INSTITUTIONAL STRUCTURE

2.6.1. Project Co-ordination

There will be three levels of co-ordination in Lebanon, on the national side:

- at the first level: the MoE as the National Lead Agency, steered by the National Steering Committee;
- at the second level: the National Project Co-ordinator;
- at the third level: team leaders of National teams implementing individual project activities.

PAP/RAC, acting as MAP CAMP Co-ordinator and following the standard procedure, will nominate an expert, within its own ranks, to follow the project in the role of MAP Project Co-ordinator. The MAP Project Co-ordinator will act in close collaboration with the MoE and the National Project Co-ordinator. MAP RACs will provide consultants' support for the implementation of respective individual project activities.

2.6.2. The Project Steering Committee

The Steering Committee (SC) will have 11 members, and will be composed of the representatives from the following institutions:

- MoE (Director General);
- high level representatives of :
 - Ministry of Agriculture;
 - Ministry of Public Works (DGUP);
 - Ministry of Tourism;
 - Municipalities of Damour, Sarafand and Naqoura;
- MoE (MAP Focal Point);
- National Project Co-ordinator;
- Syndicate of Engineers, and NGOs.

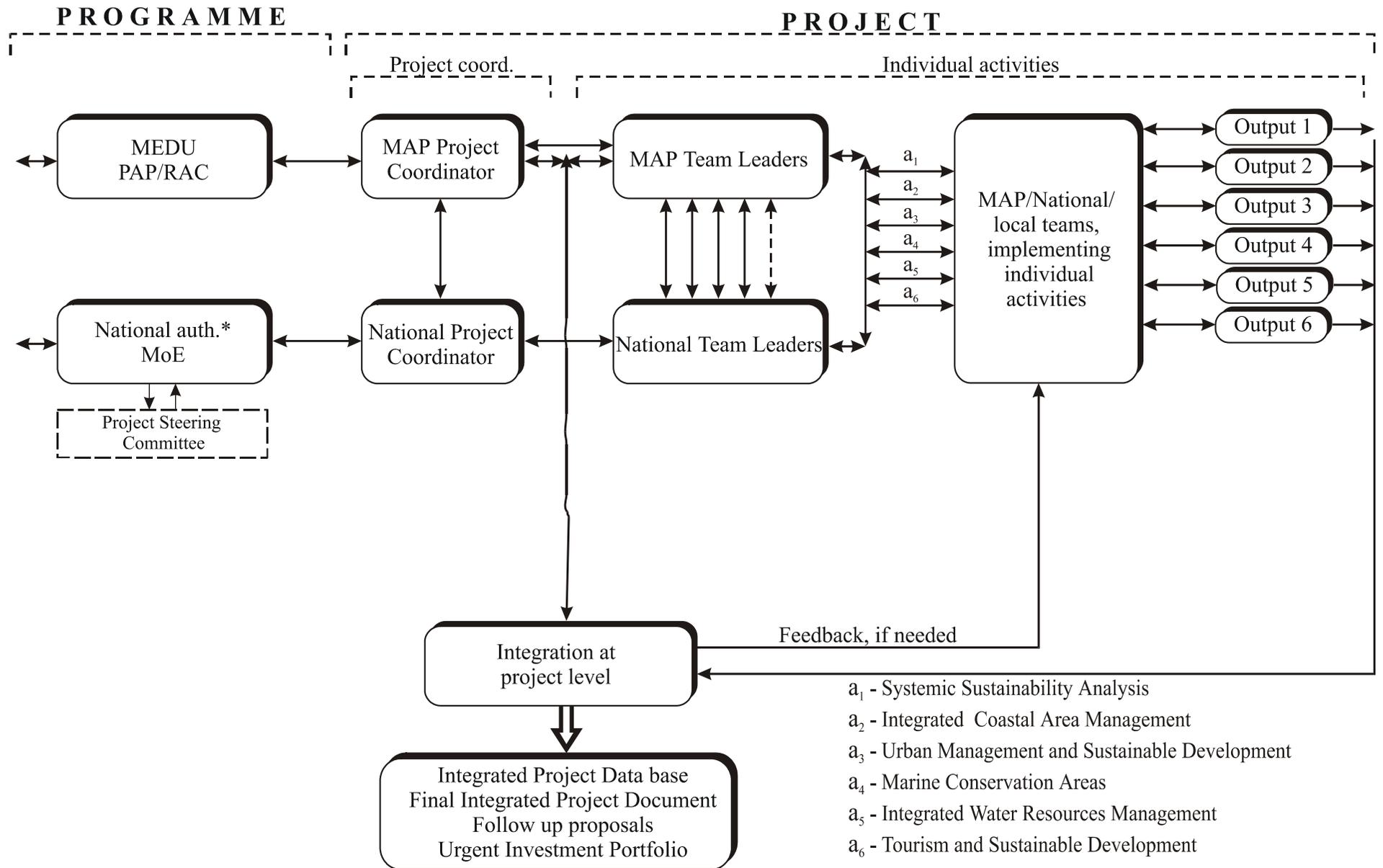
It is estimated that the SC will meet regularly 4 times a year. MAP representatives will not be obliged to participate in every meeting. The National Project Co-ordinator will act as a secretary of the Steering Committee.

2.6.3. National Project Co-ordinator

The National Project Co-ordinator will participate in the formulation and implementation of the project, in co-operation with the MAP Project Co-ordinator; in the harmonisation of the actions implemented by the national institutions involved in the project; and in the guidance and assistance to the National Team Leaders related to the implementation of individual activities.

The National Project Co-ordinator will be engaged among the national experts, but paid by and acting on behalf of MAP (in close co-operation with MoE). It will be a full time post, initially for two years. MoE will announce the post vacancy immediately upon signing of the Agreement. The National Project Co-ordinator will be selected in close collaboration with MAP.

Figure 3: Institutional arrangements at project level



* see table in 4.4.

As it is expected that co-ordination tasks will occupy half of the time of the co-ordinator's engagement, other tasks for the co-ordinator will also be envisaged, such as preparation of the draft and final versions of the Inception Report, assistance in the preparation of Technical Specifications, organisation and conducting of the Inception Workshop, preparation of the Final Integrated Report, leading role in some of the teams working on the specific CAMP activities that are close to the co-ordinator's professional background, etc.

The National Project Co-ordinator will also secure that the inputs and outputs of individual activities will be interchanged among the national teams, and integrated during the implementation of the project. The tasks of the Project Co-ordinator will be precisely defined in the Inception Report and in the respective TOR. The National Project Co-ordinator will co-ordinate the work of National Team leaders, as well as of the national consultants engaged as part of the national "in-kind" contribution.

2.6.4. Ministry of Environment Involvement

The Ministry of the Environment, in its roles of the National Focal Point for MAP and National Project Lead Agency, will exercise the overall supervision of all project activities in the country and of those implemented by national participants, and will co-operate with the MAP.

Director General of MoE and MAP National Focal Point will act as overall National Supervisor of the project.

LEDO will have a leading role in the Information and Data Management activity. There will be a strong interrelationship between LEDO's current work and the project activities. It will be in charge of GIS and use of remote sensing in coastal management. With regard to remote sensing, LEDO will establish close ties with ERS/RAC. The results of a joint project with UNEP-GRID, covering the coastal area 20 km north and south of Beyrouth, will also be used.

Some of the new staff that will be available soon in MoE will be included in the national teams. This particularly refers to the Integrated Coastal Area Management activity. The time these experts will spend on the project will be calculated and considered as an "in kind" host-country contribution.

2.6.5. National participation in the CAMP Project

The National Team Leaders, nominated and accepted by respective institutions responsible for individual activities and confirmed by the MoE and MAP, will be directly responsible for the formulation and implementation of the respective activities, and will act under the guidance of, and with the assistance provided by the National Project Co-ordinator and MAP RACs.

Members of the national teams (national experts), to be proposed by respective responsible national institutions, relevant ministries and/or municipalities which will participate in the project as part of the "in kind" contribution, will be engaged through MoE. They will act in accordance with the respective Technical Specification for the activity, endorsed by the relevant RACs, and in accordance with the respective TOR for the consultant, under the guidance of the National Team Leader. The composition of National Teams will be agreed upon by the Aide-Memoire to be signed prior to the signature of individual contracts.

2.6.6. The MAP component

The Co-ordinating Unit of MAP (MEDU), as the overall Project Co-ordinator, exercises guidance and supervision of the implementation of the project. PAP/RAC, as the MAP Project Implementing Centre, is responsible for co-ordination, guidance and implementation of the project, in co-operation with MoE in its role of the National Focal Point, and with the National Project Co-ordinator. Furthermore, PAP/RAC co-ordinates the activities with other MAP components involved in the project. Finally, it is responsible for the preparation of final project documents.

In addition the project will benefit from the use of the MCSD documents related to individual project activities.

Other MAP components involved in the project, BP/RAC, SPA/RAC, ERS/RAC and "100 Historical Sites", are responsible for the implementation of respective individual activities, under the logistical co-ordination of PAP/RAC, and in co-operation with relevant national authorities/institutions responsible for the respective activities.

MAP professionals and consultants act in accordance with their respective TORs. The area of consultancy needed and the selection of the consultant shall be defined by the Inception Report and agreed by the Aide-Memoire, to the satisfaction of MoE, in order to ensure proper use of resources and transparency.

MAP consultants and professionals involved in the project will be agreed upon by the Aide-Memoire.

2.6.7. Inputs

The Inception Report, as well as the Technical Specification for each project activity and TOR for each consultant or team of consultants, would clearly indicate which MAP inputs are to be consulted as compulsory in the implementation of activities. MCSD recommendations on sustainable coastal management, water resources management, tourism, indicators and information and public awareness will have to be taken into account. Current work within the MCSD Working Group on Urban Management and Sustainable Development will also have to be taken into account. GEF Strategic Actions Programme on Land Based Sources of Pollution in the Mediterranean will serve as a source of information for the project activities on water resources management, coastal zone management and marine conservation. And finally, MEDPOL monitoring programme will provide valuable information.

2.6.8. Reporting

During the implementation of the project, regular programme reporting at half-yearly intervals will be secured at the project level and for each individual project activity.

After the completion of the project, terminal project report and Self-Evaluation Facts Sheet (SEFS) will be prepared according to the UNEP format.

During the post-project phase, regular reporting at half-yearly intervals will be secured, on the basis of respective monitoring and evaluation activities.

Progress reports and interim documents will be prepared in English or French. Final Project Documents and Reports will be prepared in English and French.

Details of reporting activities are presented in section 6.

2.6.9. Project Partnership and Participation

Partners in the implementation of the project activities are presented in the table at the section 4.3. The table contains only the actors with clearly defined roles, and whose contribution will be calculated in a financial form, in cash or "in kind".

3. SUMMARY OF THE PROJECT ACTIVITIES*

3.1. ACTIVITIES AT THE PROJECT LEVEL

3.1.1. Activity: Co-ordination and Integration of Project Activities

Activity area

- a) the national coastal area
- b) the South Lebanon coastal area (South of Beirut).

Responsible for implementation

PAP/RAC, MEDU, Ministry of the Environment, National Project Steering Committee, National Project Co-ordinator.

Objectives of the activity

To secure a harmonised, timely and cost-effective implementation of the project in accordance with the Project Agreement, and in particular related to:

- a) establishment of the institutional structure of the project;
- b) securing co-ordination among MAP and the national authorities involved;
- c) provision of guidance and assistance to the national teams in detailed formulation and implementation of the project, and presentation of its results;
- d) co-ordination and supervision of, and assistance to the MAP Team Leaders and National Team Leaders in implementing respective activities;
- e) meeting prerequisites for implementation;
- f) providing feedback and inputs among individual activities, securing thus consistence of the outputs;
- g) securing integration of results at the project level, and preparation of the final project documents;
- h) presentation of the project results; and
- i) reporting to MAP and the Ministry of the Environment on the progress achieved.

Actions to be implemented*

- establishment of the institutional structure and of the National Project Steering Committee;
- implementation of the Inception Workshop, as initial training of the National Team Leaders and other national representatives involved in the project;
- preparation of the Inception Report; assistance to, and supervision of the preparation of Technical Specifications, preparation of TOR for consultants; contracting consultants;
- actions related to meeting prerequisites for implementation, evaluation, reporting;
- provision of logistical assistance, financial procedures, supervision and verification of expenditures incurred;
- securing flows of information and feedback related to data collected and other results of individual activities;
- proposing revision of objectives, timetable, programme, if needed;
- revision of drafts and clearance of the final outputs of the individual activities;
- preparation of the final Project documents;
- presentation of the Project results; and
- reporting on progress, and preparing the Project Terminal Report and Self-Evaluation Facts Sheet (SEFS).

Timetable

See Chapter 4, section 1.

* see also table in the section 4.4.

Outputs

- a) General co-ordination, established project structure and institutional arrangements;
- b) Co-ordinating missions, mission reports;
- c) Inception Workshop;
- d) Inception Report;
- e) Progress Reports;
- f) Final Integrated Project Document, Follow up Proposals, and Urgent Investment Portfolio;
- g) Presentation Conference, Conference Documents and the Conference Report;
- h) Project Terminal Report and SEFS.

3.1.2 Data and Information Management

Activity area

- a) the national coastal area
- b) the South Lebanon coastal area
- c) pilot areas of Damour, Sarafand and Naqoura

Responsible for implementation

ERS/RAC, PAP/RAC, Ministry of the Environment – Lebanese Environment and Development Observatory (LEDO), National Bureau of Statistics (ACS), National Council for Scientific Research (NCSR), Municipalities of Damour, Sarafand, and Naqoura.

Objectives of the activity

To establish close links with the LEDO project and develop a coastal area database, GIS and indicators, to function as the project's information centre for collection, analysis, organisation, integration and dissemination of information to the project teams implementing individual project Activities and, specifically, to create a database framework for the Municipalities of Damour, Sarafand and Naqoura.

Actions to be implemented

- to check and collect existing available data and information derived from remote sensing techniques relevant to coastal resources, land use, agriculture, sensitive ecosystems, urban growth, forests, etc;
- to properly set up and populate a coastal area database with detailed information on collected data (data holder, context in which they have been collected, temporal coverage, frequency of collection, spatial resolution, data quality and reliability, data scale, etc.);
- to design a GIS in co-operation with other involved working teams;
- to define additional information needed for the individual project activities to be developed within the CAMP (it will be possible, in the case of satellite images, to check the possibility to use the available scenes for deriving other data, as well as, more in general, to use data and information as collected and loaded in the databases and information system to derive indicators and to produce needed results);
- to acquire new satellite data for the production of additional updated information;
- to introduce proper approaches and methods for satellite data processing and integration;
- to address specific training courses to local experts for capacity building in the field of satellite data and information processing and use in an integrated management system;
- preparation of a Technical Specification for the activity;
- establishment of a framework for Municipalities Data Base for Damour, Sarafand and Naqoura;
- preparation of the Project Database and Project GIS,
- training on GIS;
- reporting on progress; and
- preparation of the Final Activity Report.

Timetable

See Chapter 4, section 1.

Outputs

- a) Initial Database;
- b) Technical Specification;
- c) Progress Reports;
- d) Framework Database for 3 municipalities;

- e) Final Project Database and GIS;
- f) Training on GIS; and
- g) Final Activity Report.

3.1.3 Activity: Participatory Programme

Activity area

- a) the national coastal area
- b) the South Lebanon coastal area
- c) pilot municipalities

Responsible for implementation

Ministry of the Environment, National Project Co-ordinator, NGOs, Municipalities of Damour, Sarafand and Naqoura, PAP/RAC.

Objectives of the activity

- a) to establish a programme of participatory activities related to the project, as appropriate within the present national conditions;
- b) to contribute to the application of the participatory principle and involvement in the project of the general public, NGOs, scientific community, and interested private industries, within the present national practice and legislation;
- c) to introduce and facilitate "bottom-up" approach in environmental management; and
- d) to contribute to upgrading of national capacities for application of participatory tools and techniques, in particular related to planning activities, by organising a relevant training course.

Actions to be implemented

- implementation of training on selected participatory tools and techniques;
- formulation of Participatory Programme;
- Participatory programme implementation;
- provision of inputs to, and feedback from the Programme activities;
- progress reporting; and
- preparation of the Final Programme Report.

Timetable

See Chapter 4, section 1.

Outputs

- a) Training on participatory programme;
- b) Technical Specification for the Participatory Programme;
- c) Input documents and feedback reports;
- d) Progress reports; and
- e) Final Programme Report.

3.1.4 Activity: Systemic Sustainability Analysis

Activity area

- a) the national coastal area
- b) the South Lebanon coastal area
- c) pilot areas of Damour, Sarafand and Naqoura

Responsible institutions

BP/RAC, Ministry of the Environment, Ministry of Public Works - Directorate General for Urban Planning (DGUP), LEDO.

Objectives of the activity

- to contribute to efforts towards a sustainable development of the South Lebanon coastal area by preparing a set of sustainability indicators and a systemic sustainability analysis, to be made on the basis of a description and assessment of the level of sustainability by main indicators;
- to introduce and apply the systemic sustainability analysis as a specific tool for sustainable management, in this case of coastal and marine areas;
- to contribute to the preparation of comprehensive integrated final project documents, by presenting a crucial analysis; and
- to create inputs of interest for the programme and activities of the Mediterranean Commission for Sustainable Development.

Actions to be implemented

Starting with the initial diagnosis, priority problems related to sustainable development will be identified, to be dealt with by the systemic sustainability analysis. The phases of the process will be the following:

- training on Sustainability Indicators and SSA;
- to define the system to be analysed and measured, to identify actors, and to establish a working group;
- to identify key indicators of sustainability;
- for each key indicator, to establish a reference point in terms of sustainability measure of the phenomenon (domain, sector) studied;
- on the basis of earlier results, to describe and assess the level of sustainability of the hitherto development and the actual situation, to identify future emergency situations and the resulting problems of sustainable development;
- to define a desirable situation in a long term (15, 20, or 25 years), and define the objectives of the key indicators, as well as the activities necessary to achieve them; and
- to elaborate a monitoring programme for the system with regard to sustainable development, to include especially the following:
 - assessment of the level of sustainability, according to the selected time span (T+n) through the monitoring of key indicators (frequency according to the speed and/or importance of the phenomena evolution); and
 - periodical re-examination of objectives (and of the necessary actions) according to the achieved results.

Timetable

See Chapter 4, section 1.

Outputs

- a) Technical Specification;
- b) Training and training reports;

- c) Sustainability Indicators Set;
- d) Systemic Sustainability Analysis;
- e) Progress Reports; and
- f) Final Activity Report.

3.2 INDIVIDUAL PROJECT ACTIVITIES

3.2.1 Activity: Integrated Coastal Area Management

Activity area

- a) the national coastal area
- b) the South Lebanon coastal area
- c) pilot areas of Damour, Sarafand and Naqoura

Responsible for implementation

PAP/RAC, 100 Historic Sites, MEDU, Municipality of Damour, Ministry of the Environment, Ministry of Public Works-Directorate General for Urban Planning (DGUP), Ministry of Transport (MoT), Ministry of Agriculture (MoA), Environmental Parliamentary Committee, Municipality of Sarafand, Municipality of Naqoura.

Objectives of the activity

- a) to elaborate the proposal for establishment of a national co-ordinating/consultative body for coastal zone management;
- b) to formulate a sustainable integrated coastal management strategy
 - (i) at national level;
 - (ii) at South Lebanon level,which will support reconstruction in South Lebanon within a sustainable development policy framework;
- c) to provide an outline of major problems and issues at national level, presenting proposals for related strategies and measures;
- d) to establish an integrated coastal area management plan for the South Lebanon coastal area;
- e) to provide assistance to national efforts towards establishment of a legal framework for ICAM in Lebanon;
- f) to review urban master plan by integrating environmental considerations;
- g) to strengthen local level capacities for the implementation of the ICAM methodology, tools and techniques and for implementation of coastal master plans;
- h) to integrate considerations on archaeological heritage into the environmental management plan;
- i) to improve the knowledge on the cultural heritage through updating of the Lebanese coastal historical sites list;
- j) to assist the Lebanese authorities in the preparation of the legislation related to the project area, with regard to the interaction of the cultural heritage and the environment;
- k) to assist the Lebanese authorities in preparing the urban master plan and the detailed plans, like the one currently in preparation for the city of Tyr; and
- l) to propose adequate models of the management teams entrusted with the preservation of the cultural heritage.

Actions to be implemented

- Phase I: Preliminary review;
- Training on ICAM tools and techniques;
- Phase II: Diagnostic analysis, policy formulation;
- Phase III: Public consultation and feedback; and
- Phase IV: Preparation of Management Documents.

Actions to be implemented by the 100 Historic Sites:

- inventory of the heritage archive available at the General Directorate of Antiquities concerning the area of the CAMP project for Lebanon;
- preparation of a map of the historical heritage and the natural sites of the CAMP area;

- preparation of the document on the preservation and valorisation of the built heritage;
- participation in elaboration of the documents on urbanism taking into account the historical, archaeological and environmental heritage;
- provision of additional information relevant to the preparation of the legislative documents; and
- organisation of the training courses for the managers of the cultural and environmental heritage.

Timetable

See Chapter 4, section 1.

Outputs

- a) Technical Specification;
- b) Diagnostic Analysis at the national and at the project area level;
- c) Integrated Coastal Management Plan, Conceptual Framework;
- d) Public consultation and feedback;
- e) Training on ICAM and training reports;
- f) Coastal Management document for Damour, Sarafand and Naqoura;
- g) Integrated Coastal Management Plan;
- h) Integrated Coastal Management Strategy and Recommendations; and
- i) Final Activity Report.

3.2.2 Urban Management and Sustainable Development*

Activity area

- a) the national coastal area
- b) the South Lebanon coastal area
- c) pilot areas of Damour, Sarafand and Naqoura

Responsible for implementation

ERS/RAC, PAP/RAC, MEDU, Ministry of Public Works-Directorate General for Urban Planning (DGUP), Municipality of Damour, Municipality of Naqoura, NGO (LEF).

Objectives of the activity

- a) to strengthen and apply the framework of the existing Local Agenda 21 Project;
- b) to strengthen and improve urban management and land-use planning;
- c) to identify urban sustainable development and management problems and land use planning conflicts in the Municipalities of Damour and Naqoura, particularly those related to the coastal environment by introducing and applying methodologies and tools based on satellite remote sensing and GIS;
- d) To assist national authorities, in particular MoE, and local authorities to resort to advanced techniques for supporting national planning activities and policies;
- e) to process and analyse remote sensing data at South Lebanon and municipality levels; and
- f) to introduce Local Agenda in Damour and Naqoura, and MAP concept in the three selected municipalities.

Actions to be implemented

- Preparatory phase:
 - Data gathering (access to database and GIS implemented for the task "Data and Information Management"). **
 - Selection and acquisition of appropriate satellite data to be used taking into account existing information relevant to land use/land cover (i.e Landsat TM/SPOT for an analysis of urban sprawl and land-use change for the entire project area - Lebanese coast south of Beirut - and/or IKONOS data -high spatial resolution satellite- for urban structure analysis and urban change in spot areas - Municipalities of Damour and Naqoura).
 - Selection and training of Lebanese planning experts on satellite Remote Sensing processing (activity to be performed in connection with the task "Data and Information Management").
- Implementation phase:
 - Processing of satellite data, classification, production of land use maps.
 - Analysis of land use change and urban sprawl (diagnostic phase).
 - Urban sprawl modelling, using GIS facilities (Arc/Info or Arc/View spatial analysis).
 - Production of future urban expansion maps relying on past trends as highlighted by the change detection activity and on socio-economic scenarios as defined by the Lebanese counterpart and the other involved RACs;
- Formulation of the two Local Agendas 21; and
- Presentation and publication of the results.

* It is assumed that satellite image acquisition and processing will be carried out within the task "Data and Information Management"

** A contribution in kind by the host Country should be envisaged in terms of provision of suitable thematic and cartographic data in digital format.

Timetable

See Chapter 4, section 1.

Outputs

- a) Technical Specification;
- b) Detailed analysis;
- c) Land use maps, change detection maps, future urban expansion maps;
- d) GIS tool;
- e) Urban Management Studies;
- f) Progress Reports;
- g) Formulation of two Local Agenda 21 for Damour and Naqoura; and
- g) Final Activity Report.

3.2.3 Marine Conservation Areas

Activity area

- a) the national coastal area – related to national level strategies and measures;
- b) the pilot areas of Damur and Naqoura.

Responsible for implementation

SPA/RAC, Ministry of the Environment, and Faculty of Sciences (University of Lebanon)

Objectives of the activity

- to implement a pilot activity related to the inventory of marine biotopes, following the technical tools elaborated within MAP, as a contribution to national efforts toward conservation of natural sites of particular interest, and fragile and vulnerable marine resources.
- to initiate and provide the basis and experience for a continuous activity on Marine Conservation Areas in the country, by formulating protection and management measures for the areas covered by the Activity, and proposals for the follow up of the action.

Actions to be implemented

- defining the exact geographical scope of the field survey;
- collection of existing relevant information and data concerning the study areas;
- compilation of an inventory of marine biotopes in the study area, mapping them using a GIS software, establishment of a database of the various species of marine fauna and flora with special focus on those appearing in the annexes to the SPA Protocol;
- evaluation and interpretation of results;
- elaboration of proposals for management measures and follow-up action; and
- progress reporting.

Timetable

See Chapter 4, section 1.

Outputs

- a) Inventory, analysis and evaluation of the sites surveyed;
- b) Database, maps, visual records;
- c) Recommendations for the integrated management (including protection) for the two areas covered by the activity;
- d) Progress Reports;
- e) Follow-up proposal; and
- f) Final Activity Report.

3.2.4 Integrated Water Resources Management

Activity area

- a) the South Lebanon coastal area

Responsible for implementation

PAP/RAC, Ministry of the Environment, Ministry of Hydraulic and Electrical Resources, Ministry of Public Health, Municipalities of Damour, Sarafand and Naqoura.

Objectives of the activity

- a) to establish a management framework for the protection, use, monitoring and long-term conservation of water resources at the regional level, to serve the diverse spatial and sectoral development needs arising from population growth, agricultural activity, tourism and industry;
- b) to apply the methodology and tools of Integrated Water Resource Management; and
- c) to prepare a document on demand and availability of water resources.

Actions to be implemented

- introduction and application of an integrated water resource management approach;
- assessment of the availability and demand of freshwater resources with a specific focus on the municipalities, on the water losses and on inefficient use;
- sea and fresh water pollution protection and monitoring; and
- training on integrated water resources management.

Timetable

See Chapter 4, section 1.

Outputs

- a) Technical Specification;
- b) Detailed Analysis;
- c) Analysis of water resources availability and demand;
- d) Progress Reports; and
- e) Final Activity Report.

3.2.5 Tourism and Sustainable Development

Activity area

- a) the national coastal area
- b) pilot areas of Damour and Naqoura

Responsible for implementation

PAP/RAC, MEDU, Ministry of Tourism, Municipalities of Damour, Naqoura, Syndicate of Hotels, NGOs.

Objectives of the activity

- to contribute to a sustainable development of tourism in the South Lebanon coastal area;
- to contribute to the protection of the environment and rational use of tourism resources;
- to identify conflicts, opportunities, apply carrying capacity analysis of available resources, and identify the environmental threats of tourism development;
- to formulate recommendations for land use and future development of tourism; and
- to formulate the proposal for a follow up of the activity.

Actions to be implemented

- preparation of Carrying Capacity Assessment Studies in the Municipalities of Damour and Naqoura;
- preparation of recommendations for land use and future development of tourism;
- formulation of a project outline for the follow up of the activity; and
- preparation of the final document: policies and strategies for tourism in the South Lebanon coastal area, applicable to the entire Lebanese coastal area.

Timetable

See Chapter 4, section 1.

Outputs

- a) Technical Specification;
- b) Detailed Analysis;
- c) Carrying Capacity Assessment Studies for Municipalities of Damour and Naqoura;
- d) Regional recommendations for land use and future development of tourism;
- e) Progress Reports; and
- f) Final Activity Report.

4 WORKPLAN, TIMETABLE, BUDGET AND COST-SHARING

4.1 WORKPLAN AND TIMETABLE

The project Workplan, structured according to the implementation procedure, and the relevant Timetable are presented below:

Project Workplan and Timetable

1. Signature of Agreement	March 2001
2. Detailed formulation of the Project	March 2001 – June 2001
<ul style="list-style-type: none"> • Draft Inception Report • Draft Technical Specifications • Diagnostic Analysis • Inception Workshop • Final Inception Report • Meeting prerequisites for implementation 	
3. Implementation	July 2001 – December 2003
<u>3.1. Initial activities</u> <ul style="list-style-type: none"> • Final Technical Specifications • TOR for consultants • Signature of consultants' contracts 	July 2001 – September 2001
<u>3.2. Implementation of Project activities</u>	October 2001 – April 2003
<u>3.3. Integration of results</u> <ul style="list-style-type: none"> • Final integrated project documents • Presentation • Terminal Report 	May 2003 – November 2003
4. Post project activities	December 2003 – December 2005
<u>4.1. Follow-up activities (host country)</u>	
<u>4.2. Monitoring, evaluation, reporting (host country)</u>	
<u>4.3. Presentation of the Project results at MAP level (MAP - PAP/RAC)</u>	

4.3 INSTITUTIONS INVOLVED

The following institutions will be involved in the implementation of individual activities:

ACTIVITY	ACTORS	
	LEBANON	MAP
ACTIVITIES AT THE PROJECT LEVEL		
Co-ordination and Integration	<ul style="list-style-type: none"> Ministry of Environment (MoE) Project Steering Committee National Project Co-ordinator National Team Leaders 	<ul style="list-style-type: none"> MEDU PAP/RAC MAP Project Co-ordinator
Data and Information Management	<ul style="list-style-type: none"> MoE - LEDO National Bureau of Statistics (ACS) National Council for Scientific Research (NCSR) Municipalities of Damour, Sarafand and Naqoura 	<ul style="list-style-type: none"> PAP/RAC ERS/RAC
Systemic Sustainability Analysis	<ul style="list-style-type: none"> MoE Ministry of Public Works-Directorate General for Urban Planning (DGUP) 	<ul style="list-style-type: none"> BP/RAC
Participatory Programme	<ul style="list-style-type: none"> MoE NCSR NGOs Municipalities of Damour, Sarafand and Naqoura 	<ul style="list-style-type: none"> PAP/RAC
INDIVIDUAL PROJECT ACTIVITIES	LEBANON	MAP
Integrated Coastal Area Management	<ul style="list-style-type: none"> MoE DGUP Ministry of Transport (MoT) Ministry of Agriculture (MoA) Environmental Parliamentary Committee Municipalities of Damour, Sarafand and Naqoura 	<ul style="list-style-type: none"> MEDU PAP/RAC 100 Historic Sites
Urban Management and Sust. Development	<ul style="list-style-type: none"> Municipalities of Damour and Naqoura NGO (LEF) 	<ul style="list-style-type: none"> MEDU PAP/RAC ERS/RAC
Marine Conservation Areas	<ul style="list-style-type: none"> MoE Ministry of Tourism NCSR Municipalities of Damour and Naqoura NGO (LEF) 	<ul style="list-style-type: none"> SPA/RAC
Integrated Water Resources Management	<ul style="list-style-type: none"> MoHER MoE Ministry of Public Health Municipalities of Damour, Sarafand and Naqoura 	<ul style="list-style-type: none"> PAP/RAC
Tourism and Sustainable Development	<ul style="list-style-type: none"> Ministry of Tourism Municipalities of Damour, Sarafand and Naqoura Syndicate of Hotels NGOs 	<ul style="list-style-type: none"> MEDU PAP/RAC

5 ACHIEVEMENT INDICATORS

Achievement indicators will be applied when evaluating:

- a) progress of the project implementation at the project level and at the level of each project activity;
- b) use of the project results in the post project period.

5.1 PROGRESS ACHIEVEMENT INDICATORS

When evaluating the progress of the project implementation the following achievement indicators will be applied:

5.1.1 Progress achievement indicators at the project level

- percentage of successfully implemented individual activities, as envisaged by the project Workplan and by Technical Specification;
- timely implementation of the project – percentage of the time of extended project duration, if any, in comparison with the original Timetable of the project;
- overrunning of approved budget, if any – percentage of overrun;
- percentage of outputs produced in comparison with the number of planned outputs;
- number of national/local experts involved in the project;
- the participatory programme: number of actions, number of NGOs involved, number of other organisations and number of stakeholders involved in the programme, feedback and quality;
- number of persons trained;
- equipment supplied;
- existing data base expanded (approx. percentage of expansion);
- the catalytic effect of the project, intellectual, financial (if any, to be expressed in financial terms); and
- contribution of MAP consultants, experts, professionals.

The assessment of the progress according to the above indicators will be reported within regular Progress Reports at the project level, to be prepared as defined in Chapter 6, section 1.

5.1.2 Progress achievement indicators at the level of individual activities

When evaluating the progress of individual activities, in addition to the achievement indicators listed above under a), specific progress achievement indicators will be identified for each activity within respective Technical Specification. The assessment of the progress according to the above indicators will be reported within regular Activity Progress Reports, to be prepared as defined in Chapter 6, section 2.

5.2 PROJECT ACHIEVEMENT INDICATORS

When evaluating the project results in the post project period, the following achievement indicators will be applied:

5.2.1 Evaluation to be made by the Ministry of the Environment

- provision of an integrated solution for sustainable development of the project area;
- promotion of a sustainable use of major resources of the project area, or an improved protection of resource productivity and ecosystems;

- implementation, at the project level and at the country level;
- improvement of the quality of life and health conditions of the resident population;
- improvement of the socio-economic conditions in the region;
- benefits identified versus those expected, impacts on sustainable use of land resources;
- improved measures for the protection against pollution, emergency preparedness, protection of natural habitats and biodiversity, conservation of historic and cultural values, etc.;
- introduction of participatory activities and practice in the host country;
- implementation in practice of individual solutions and recommendations of the project;
- formulation of a follow-up remedial programme on the basis of the project results;
- evaluation of professional capacity of involved institutions and authorities achieved by programme implementation;
- stakeholders response and participation;
- increased public awareness;
- inputs into national practice:
 - application of tools and methodologies;
 - implementation of recommendations related to improvement of institutional and legal arrangements in the country or in the project area;
 - application of the project results in other areas of the host country;
 - initiation of similar programmes in the country; and
 - assistance by host country institutions and teams to other countries, if any.

5.2.2 Evaluation to be made by PAP/RAC

In addition to the above listed indicators, the following ones will have too be taken into account:

- successful application of methodologies, tools and procedures;
- successful integration of activities during the implementation stage, and of results in the final phase of the project;
- the catalytic effect of the project, expressed in qualitative terms;
- evaluation of conclusions of the Presentation Conference;
- inputs into national practice, or application of the results in other Mediterranean countries;
- inputs at the regional level:
 - to the Mediterranean Commission for Sustainable Development;
 - when formulating regional policies and strategies; and
 - when distributing and applying the project results.

The assessment of the project results, taking into account the above listed indicators, will be reported by the Ministry of the Environment within regular Post Project Reports, as defined in Chapter 7, section 1; and by PAP/RAC within the Project Terminal Report, and other documents, as defined in Chapter 7, section 3.

6 PROGRESS REPORTING

Regular Progress Reports will be presented:

- a) at the project level; and
- b) at the level of individual activities.

In addition, at the end of the project, reports will be prepared at the project level and for each activity.

Progress reports will be provided at half-yearly base by:

- the respective National Team Leader at the level of each individual project activity;
- National Project Co-ordinator at the project level; and
- MAP Project Co-ordinator (alternatively joined progress reports at the project level prepared by National Project Co-ordinator and MAP Project Co-ordinator).

The reports of National Team Leaders will be presented to National Project Co-ordinator and to PAP/RAC.

The reports of National Project Co-ordinator and of MAP Project Co-ordinator will be presented to MoE, to PAP/RAC and to MEDU.

The Final Project Report will be prepared by MAP Project Co-ordinator on the basis of the draft version to be prepared by the National Project Co-ordinator (alternatively it could be prepared jointly by the National Project Co-ordinator and the MAP Project Co-ordinator).

7 POST PROJECT ACTIVITIES

In order to provide conditions for the utilisation of the project results after the official closure of the project, the following activities will be implemented: a) formulation and gradual implementation of a Follow-up Programme, b) monitoring of the use of the project results, evaluation of the monitoring results, reporting, and c) formulation of proposals for the use of the project results at the MAP level. The time frame for implementation of the above activities is defined by the project Workplan and Timetable, presented in Chapter 4.

7.1 FOLLOW-UP ACTIVITIES

Taking into consideration the solutions and recommendations presented by the Final Integrated Project Document, the Follow-up Proposals and the Urgent Investment Portfolio, as well as the conclusion of the Presentation Conference, the Ministry of the Environment will prepare a Project Follow-up Programme (Plan of Actions). PAP/RAC will provide assistance as appropriate. The Follow-up Programme will be submitted to the relevant national authorities for approval.

According to the Programme (Plan of Actions), the project results will be gradually implemented/introduced in the national practice.

7.2 MONITORING, EVALUATION AND REPORTING

Ministry of the Environment will monitor the project-related follow-up activities identifying and registering:

- a) the progress achieved;
- b) actions in preparation, on-going and implemented;
- c) project results applied; and
- d) other benefits of the project.

The process will be implemented at the project area level, as well as on a national scale.

During the monitoring process the following aspects will be taken into consideration:

- activities implemented, their results and outputs, direct benefits, financial aspects, problems encountered, corrective actions undertaken;
- activities in preparation and/or on-going: present state, problems, actions undertaken or needed for solving them, prospective of implementing activities in preparation;
- methodologies, tools, and procedures applied by the project: introduced or applied in national/project area practice, problems encountered, corrective actions, expected results;
- planning initiatives/activities undertaken or in preparation;
- institutional and/or legal and/or management related initiatives according to the proposals made by the project;
- catalytic effect of the project in the project area or at the national level; and
- identification of direct, and of indirect benefits and beneficiaries of the project.

The evaluation procedure, to be applied by the Ministry of the Environment, will be based on the results of the monitoring process, following the elements listed above, and taking into consideration the following:

- a) evaluation of the achievements according to achievement indicators, defined in Chapter 5, section 2.
- b) evaluation according to the following:
 - contribution to improved sustainability within the project area, following sustainability indicators and the results of the Sustainability Analysis;

- direct and indirect benefits of the project, and their significance;
- prospective of progress of the follow-up activities in the preparation and/or on-going;
- nature and significance of problems of a general nature and of those related to individual follow-up actions, impacts of these problems on the use of the project results; and
- lessons learned.

PAP/RAC will provide assistance when establishing the monitoring process and evaluating the monitoring results.

The results of the monitoring and evaluation process will be reported by the Ministry of the Environment to MAP through PAP/RAC at half-yearly intervals within relevant Half - Yearly Post Project Reports.

At the end of the reporting period, the Ministry of the Environment will prepare the Final Post Project Report, summarising the results achieved and benefits identified, indicating problems and lessons learned, and proposing further activities, as appropriate and needed.

7.3 USE OF RESULTS AT MAP LEVEL

In order to create conditions for the use of the project results at the MAP level, PAP/RAC will formulate Reports, including proposals for the use of the project results at that level:

- a) after the official closure of the project; and
- b) at the end of the post project reporting period.

The PAP/RAC Reports will include:

- a) findings by PAP/RAC, related to:
 - results and experience of the project, applicable at MAP level (policies, strategies, procedures, methodologies);
 - lessons learned, to be taken into account at the MAP CAMP level (related to the formulation and implementation of projects, follow up, use of project activities, integration procedure, participation, etc.); and
 - results and experience to be recommended as pilot ones for solving similar problems in the region.
- b) findings extrapolated and summarised from the Half-Yearly Post Project Reports and the Final Post Project Report, and identification of results relevant for the MAP level; and
- c) proposals related to the use of the project results at the MAP level.

Evaluating the proposals and applying or using the results at MAP level is within the competence of the MEDU and of the MCSD.