

**COVER PAGE INFORMATION**

<b>1. Country:</b>	<b>Mexico, Cuba, United States of America*</b>	
<b>2. Focal Area:</b>	<b>International Waters</b>	
<b>3. Operational Programme:</b>	<b>OP9 - Integrated land and water multiple focal area programme</b>	
<b>4. Project Title</b>	<b>A Transboundary Diagnostic Analysis and Strategic Action Programme for the Gulf of Mexico Large Marine Ecosystem</b>	
<b>5. Total Cost:</b>	<b>To be determined</b>	
<b>6. PDF Request:</b>	<b>Estimated: US\$ 473,000</b>	
<b>7. Co-Financing :</b>	<b>Govt. of Mexico</b>	<b>US\$ 10,000</b>
	<b>Govt. of Cuba</b>	<b>US\$ 10,000</b>
	<b>Government of USA</b>	<b>US\$ 30,000</b>
	<b>CEC</b>	
	<b>UNDP programs</b>	
	<b>UNIDO programs</b>	<b>US\$ 20,000</b>
	<b>Total</b>	<b>US\$ 70,000</b>
<b>8. Implementing Agency:</b>	<b>United Nations Development Programme (UNDP)</b>	
<b>9. Executing Agency:</b>	<b>United Nations Industrial Development Organization (UNIDO)</b>	
<b>10. Duration:</b>	<b>14 months</b>	

**PROJECT STRUCTURE**

**11. PROJECT OBJECTIVES**

The objective of this proposed project is to enhance national regional efforts to move towards sustainable integrated management of the environment and resources of the Gulf of Mexico Large Marine Ecosystem (GOMLME). The first step in this process, will be strengthening of a mechanism for regional co-operation; review of the existing knowledge of the status and threats to the GOMLME and development of an Strategic Action Program (SAP) of legal, policy and institutional reforms and investments, to address both these threats to ecosystem sustainability and the gaps in knowledge essential to the sustainable management of the ecosystem. The PDF B proposal aims specifically to complete a Transboundary Diagnostic Analysis and a Strategic Action Program. In addition to completing the SAP, the GEF role in the resulting project is expected to focus on the strengthening of effective consultation, co-ordination of assessment of donor support and the agreed incremental costs of pilot demonstrations related to the priorities.

\* USA is a participant country not receiving GEF funds.

**concept**



THE WORLD BANK

## 12. BACKGROUND AND PROBLEMS

### (a) Geographical area covered by the proposal

The GOM/LME is situated between the east coast of Mexico, the northwest coast of Cuba and the south coast of the United States. It is almost self-enclosed with one small entrance and exit in the western central North Atlantic Ocean and a connection with the Caribbean Sea to the South.

### (b) Regional and global significance

The GOM/LME is an important centre of marine biodiversity, marine food production as well as oil and gas production. The GOM/LME's distinctive bathymetry, hydrography, productivity and trophodynamics combined to make it as one of the most productive gulf ecosystems in the world. It has a mean annual productivity of 300g C/m<sup>2</sup>/yr that can be compared to the productivity of the Gulf of Alaska at 140g C/m<sup>2</sup>/yr. The high level of primary productivity of the GOM/LME supports an important global reservoir of biodiversity and biomass of fish, sea birds and marine mammals. This high productivity is at risk as shown by recent evidence of over-capitalization and by a shift of fishing to lower tropic levels and smaller sizes that changes the structure of the food web resulting in serious economic losses. The geologic substrate of the GOM/LME hold rich deposits of oil and natural gas, but this benefit brings with it the threat of pollution. A recent scientific meeting in Mexico identified pollution from the oil industry as one hypothesis to explain the dramatic decrease in shrimp landings. The natural beauty of the coastal region has also enabled the development of a significant coastal tourism industry in much of the area. The tourism industry is also threatened by anthropogenic impacts, such as oil extraction and increasing urbanization.

### (c) Problems to be addressed

Increasingly, Mexico, Cuba and the United States have become aware of some of the threats to, and issues associated with the management of the GOM/LME. These include:

- Serious degradation of coastal areas adjacent to urban centres of the region as a result of pollution (quite possibly persistent toxic substances) and habitat loss and unsustainable exploitation of marine and coastal natural resources;
- Increasing exploitation of the marine biomass by both artisanal and industrial fisheries in the absence of an agreed long-term regional strategy for the sharing of a sustainable economic yield;
- Increasing harmful algal blooms, oxygen depletion events, oil spills, vessel groundings on delicate coral reefs, coastal subsidence due to hydrocarbon extraction, ongoing petrogenic energy exploration, and production both offshore and in coastal areas with its attendant pollution risks that threaten coastal and marine biodiversity and contribute to the need for Marine Protected Areas;
- An apparent increase in the frequency of marked environmental changes in the ecosystem manifesting themselves through fluctuations in abundance and distribution of fish, birds and mammals;
- A basin that is highly vulnerable to storm events and fluctuating climate conditions may pose serious problems that require a different level of management of the LME's coastal and marine areas.

The Gulf of Mexico may also present an opportunity for important climate change monitoring in relation to the Loop Current and the advection of nutrients and transport of Mississippi Drainage Basin effluents. The basin is highly vulnerable to storm events and their predicted increase could pose serious problems to management of the coastal and marine areas.

### 13. PROJECT DESCRIPTION

#### (a) Concept

The full GEF intervention will address the priority transboundary and biodiversity concerns of the Gulf of Mexico Large Marine Ecosystem in the context of fluctuating climate conditions consistent with OP9. These will be defined in the Transboundary Diagnostic Analysis and prioritised in a Strategic Action Programme of legal, policy and institutional reforms, and investments (both of which will be completed during the PDF-B intervention). At the stage of designing the PDF-B, it is difficult to anticipate whether the implementation of the Action Programme, through reforms, demonstrations and investments, will require a single initial project or a series of coordinated multiple interventions in OP's 2, 9 and 10. For the purposes of the present document, the full intervention will be termed as 'the project'.

The *main objective* of this project will be to address top priority multiple focal area issues of the Gulf of Mexico LME, its coastal area, and any tributary basins of concern, in an integrated fashion.

In summary, the project will:

- (1) build on pertinent activities already underway,
- (2) assist with the development of a regional Strategic Action Programme for the GOM/LME;
- (3) Conduct on-the-ground demonstrations as part of SAP implementation along with priority reforms.

#### (b) Activities and outputs

The project will develop the tools necessary to ensure effective implementation of the SAP: policy and legislative tools, consultative mechanisms, institutional strengthening, economic instruments, investments from the public and private sectors and tools for ensuring effective monitoring and evaluation of SAP implementation and focus on hot spots to build capacity during implementation.

Specific activities will include:

- the development of appropriate frameworks and mechanisms at both regional and national levels for consultation, co-ordination and co-operation;
- the development of institutional capacities of the key agencies and institutions in the region that contribute to the integrated sustainable management of the GOM/LME;
- workshops with stakeholders for SAP implementation and to identify options for project funding.
- the development and implementation of a regional information system for transboundary and globally significant biodiversity issues;
- the planning and initiation of joint surveys for assessing the changing states of the GOM/LME;
- the harmonization of policies and legislation relating to activities affecting the GOM/LME;
- the establishment of an ecosystem-wide mechanism for developing indicators for forecasting the health of the GOM/LME;
- developing and implementing innovative science-based tools for decision making in sustainable ecosystem management and the conservation of biodiversity, both in the GOM itself and in the fringing aquatic habitats;
- improved system-wide management of living resources and key habitat;
- increased external support for activities that minimize and mitigate the negative impacts of development (petroleum, urbanization, tourism development, resource exploitation) through the promotion of sustainable approaches and the use of tools such as EIA;
- improvement of the capacity for ecosystem-based resource management and protection of biological diversity through ICM demonstrations plus LME-wide management regimes;

### **(c) Anticipated incrementality**

With fragmented baseline activities, sector by sector, new integrated management approach needed to conserve living resources and habitat, and protect LME from pollution. Need to assist countries to identify priority areas for conserving habitat and living resources, pollution threats and sensitivity to climatic fluctuations as well as transboundary issues; develop action program to address and start demonstrations building capacity of countries to do it on their own; test this in simple setting for possible replicability elsewhere within GEF and other continents; also coordinated approach to system-wide management.

The project will achieve an alternative approach to the management of living resources and protection of the marine environment of the GOM by:

- (1) building on the baseline of existing international cooperation (e.g. under the UNEP Caribbean Environmental Programme or bilateral projects of scientific research) and current efforts within individual countries to improve the management of renewable natural resources (including fisheries), protect biological diversity and combat the degradation of marine and coastal habitats;
- (2) involving the private and public sector engaged in the exploitation of the GOM and its resources;
- (3) creating investment projects to attract new funding to environmentally sustainable activities that will benefit from improved protection of the GOM and its natural habitats (notably tourism and more environmentally sound practices for resource exploitation);
- (4) enabling a framework of pilot projects that will attract funding from other international donors as well as local sources within the region.

### **(d) Replicability**

The component elements of this project will be highly replicable and will serve as pilot projects that may be applied in other coastal and marine systems and adjacent basins. SAP- reforms will ensure priorities will be followed up.

The Regional Project provides an opportunity for the GEF to be a “catalyst for action”. There may be a number of MPAs for example, that require support beyond the planning stage and can be the subject of demonstration projects for implementation. The results of these projects can be replicated with or without GEF support. The diversity of habitat types in the region makes it possible to replicate successful demonstration projects in other regions of the world with similar environmental pressures.

#### **14. IMPLEMENTATION ARRANGEMENTS**

There is no current institutional arrangement for co-operation between the three countries for the protection of the GOM/LME. One of the first tasks of the PDF-B will be to initiate discussions on such a co-ordinating mechanism, initially for the sole purpose of implementing the PDF-B itself as the initial approach to system-wide management of transboundary resources..

Groundwork for this project was laid in August 2000 during a workshop in Havana, Cuba, co-hosted by the Cuban Ministry for Science, Technology and the Environment (GEF Operational Focal Point) and UNIDO. Participants also included representatives from INP/SEMARNAP and CINVESTAV (Mexico), NOAA (USA), Environmental Agency, Institute of Oceanology, Institute of Ecology and Systematic, Fisheries Research Centre, Directorate of Environmental Policy, the Ministry for Foreign Investment and Economic Collaboration, and the Ministry of Fishing Industry (Cuba). The participating countries have a history of bilateral co-operation and this project will be the first opportunity for the countries to work together on a regional, ecosystem-wide multi-year project.

Based upon this clear demonstration of willingness to co-operate, the Executing Agency will request each country to appoint a project National Focal Point. They will then consult with the three NFPs to agree upon the composition of the project Steering Group (see section 15) and its venue. The Steering Group will act as the executive decision-making body for the project, setting the workplan and evaluating progress and outputs. They will ensure the broadest possible involvement of stakeholders in the implementation of the PDF-B. One of the first functions of the SG will be to agree upon a provisional location for the team co-ordinating the project. This will be an existing National Institution located within the project area. The project has made provisions for the additional requirement (computers, communication equipment, office supplies, and communication expenses) for the team but it is assumed

that the premises will be an in-kind contribution of the host country. Close liaison will be established with the UNDP Resident Representative in the host country (the Principle Project Resident Representative PPRR) in order to provide UN System backstopping. Further details of the project team and the Steering Group are given in section 15(b).

The above arrangement will be regarded as a provisional one. On the basis of the valuable experience gained during PDF-B implementation, the three participating countries, in close co-operation with the GEF and its Implementing and Executing Agency partners, will devise a longer-term mechanism. Such a mechanism will include a statutory system for consultative management decisions on the day-to-day running of the project as well as the Steering Group, expanded and with increased responsibilities.

One of the first tasks of the project team will be to establish an efficient and accountable electronic communications network between the NFPs and the key international and national partners. This, properly managed, will enable efficient decision-making without the cost and complication of mobilising officials between the three countries. Regular multilateral consultations will be held between the NFPs, the Executing agency and the project team using electronic communication facilitated by the Project.

The United Nations Industrial Development Organisation will act as the Executing Agency for this project. UNIDO has valuable experience as Executing Agency in a number of similar interventions and has a solid reputation as a technically competent 'honest broker'. One of its officials will act as Project Manager in support of the decentralised day-to-day management and co-ordination role of the Chief Technical Advisor (see 15b). The Implementing Agency for the Project will be UNDP, bringing the advantages of a long established network of country offices in the region and a wealth of experience in implementing GEF IW projects.

## **15. PDF-BLOCK B OUTPUTS AND ACTIVITIES**

### **(a) Purpose of the PDF support**

The proposed PDF-B is designed to overcome identified barriers to the preparation of a proposal for a full GEF Project. These are:

- the need to identify and prioritize the transboundary problems affecting the GOM and their root causes through the completion of a transboundary diagnostic analysis (based upon the methodology under development in UNEP);
- the need to examine priorities for action on the identified issues and to conduct a broad consultation amongst stakeholders, the results of which will be embodied in a Strategic Action Programme of legal, policy and institutional reforms and investments;
- the need to reach a formal consensus between all three countries on a suitable mechanism for implementing the SAP;
- the need for a concerted and co-ordinated programmatic approach between all organisations, donors and institutions proposing interventions on the priorities identified in the SAP.

The three nations are particularly aware of both their inability to effectively monitor the ecosystem as a whole and of the absence of institutional mechanisms at both national and regional levels to address this range of issues. They are moving to strengthen regional programmes related to management and protection of coastal habitats, energy resources and renewable living marine resources and to increase mutual co-operation in the management of the ecosystem as a whole. In particular, they expect that with support from the GEF they can not only secure a broad range of national economic benefits, but they can do so while sustaining the ecological capital of the LME and also generating significant global environmental benefits in terms of maintenance of the ecosystem, itself with its associated biological diversity and as a predictor of trends in global warming. These benefits can be achieved through the co-operative and system-wide application of science to the assessment and management of the GOM/LME.

**(b) Activities to be developed: description by component**

*Component 1: Development of a project coordinating mechanism*

**(a) Initial consultations and establishment of a project steering group**

Initial consultations will be held in order to clarify the project strategy and ensure that governments appoint National Focal Points (NFPs) and agree on the venue for the first meeting. A Project Steering Group will then be established and convened in order to agree upon the detailed workplan and timetable for the project and the terms of reference and location of its co-ordinator and technical assistants. The institutions having initial direct roles in the project will also be identified and technical experts will be nominated. The Steering Group will include National Focal Points (appointed by the three governments), technical advisors (nominated from cooperating national institutions), representatives of the GEF Implementing Agencies and UNIDO. It will also include any other major donors to the project and eventually the Project Coordinator as an observer.

**(b) Establishment of the project team.**

As a follow-up to the first Steering Group meeting, a small specialist team will be contracted to coordinate project implementation. This will include a Project Coordinator (Chief Technical Advisor – CTA), two technical assistants and one secretary. These staff will be recruited according to TORs approved by the Steering Group and should complement each other in terms of technical knowledge and linguistic ability. Recruitment of the CTA will be according to the rules of UN international organizations. The location of the team will be in facilities offered by one of the three countries and agreed by the Steering Group. Apart from coordinating the smooth implementation of the PDF-B, the team will also ensure the establishment of direct e-mail linkages between all the key players both within and outside the region.

*Component 2: Preparation of a transboundary diagnostic analysis (TDA)*

This will follow the new UNEP TDA Guidelines that broadly reflect the methodology developed for the Global International Waters Assessment. There will be no need to duplicate the information gathering exercises for GIWA and the TDA but the level of detail will be somewhat greater in the case of the TDA. A core group consisting of three specialists from each of the three participating countries will undertake the work. These will be specialists in the areas of marine/coastal environmental science, resource economics and institutions/laws respectively. Much of the information-gathering will be at a national level and the group will meet together on three occasions at key stages in the process in order to consolidate its work into a single comprehensive analysis. The core group of nine specialists will not be working in isolation. They will each complete national information-gathering tasks and may require the support of additional researchers grouped into national networks.

In addition to the work of this team, a workshop will be held to bring together scientists from the region with the objective of sharing basic information on the GOM LME and proposing follow-up research to fill identified knowledge gaps.

The overall process described above will summarise and document the following:

- a. The state of the art with respect to the scientific and technical understanding of the biophysical processes of the GOM/LME, including the identification of major gaps in our understanding that need to be addressed by the project;
- b. The key threats, problems and issues associated with the GOM/LME including unsustainable harvesting of marine resources, land use changes and coastal pollution. In particular, issues of persistent toxic substances will be examined, including atmospheric deposition;

- c. The policy, legislative and regulatory environment in the countries, including adherence to the various international conventions such as UNCLOS, MARPOL, Cartagena Convention, RAMSAR, CITES, and so on;
- d. The socioeconomic issues associated with the GOM/LME and its adjoining coastal areas;
- e. The institutional environment in terms of their roles and responsibilities as well as their technical and human resource capacities.

***Component 3: : National and regional dialogues and the preparation of a draft Strategic Action Programme***

In order to be effective and truly country driven, the SAP needs to be the product of a very carefully facilitated dialogue at the national and regional level. The technical starting point will be the TDA. This component is designed to enable all of the key stakeholders to have a say in the SAP design. It provides resources for two national dialogues (in each country) and two regional meetings to bring together the results of this process, to examine the options for action and to agree on the text of the draft SAP. GEF M&E indicators will be developed during the SAP process for the project.

Having a strong technical consensus on necessary actions will greatly facilitate eventual project development and lead to a very strong SAP that gives a necessary major role to scientific and technical organisations nationally and internationally. The process will include all stakeholders, including coastal communities and artisanal fisheries, and will identify key issues, options and possible alternatives that will lead to better management of the ecosystem. The product of this process will be consensus on the key issues, alternatives and options for the management of the GOM/LME.

Consideration of financing options will be important from the very start of the PDF-B process and donor agencies and institutions will play an important part throughout the consultative process. The preliminary SAP will include a Financing Plan and this will be negotiated in detail with donors as it is completed. Donor conferencing will define how the SAP as a whole is to be funded, the specific role of each donor agency or institution and the dimensions on the proposal to be submitted to GEF.

The SAP developed through this mechanism will be submitted to the three governments by the National Focal Points. It is appreciated that the approval and endorsement of the SAP at a senior governmental level may be beyond the time frame of the PDF-B itself.

***Component 4: Development of a GEF Project Brief***

This final component of the project will be the responsibility of the project team (working in close liaison with the IAs). They will prepare the first draft of a GEF Project Brief. The main purpose of this document is to transform the SAP into a practical programme containing project elements that can be executed by the GEF together with collateral donors. The document will indicate priorities and timetabling and will serve to match the identified needs (recorded in the SAP) with the practicalities of project funding within the GEF and other programmes. At this point, the second meeting of the Steering Group will be called. This will adopt the Brief (amended as necessary). The brief will be submitted to the GEF National Focal Points for endorsement.

Full details of timetabling are indicated in section 20 below.



Table 1. PDF-B Outputs, activities and implementation

<u>Outputs</u>	<u>Activities</u>	<u>Implementation</u>
<i>Component 1: Development of a project coordinating mechanism</i>		
(a). Regional Project Steering Group	1. Formation and two meetings of the 12-16 member Group. The Group will be responsible for defining the overall project strategy and workplan, and reviewing technical outputs of the project. Its decisions shall be taken by consensus. The meetings will be held towards the beginning and end of project implementation.	The meetings will be convened by UNIDO in close coordination with the IAs. It will include the following participants: <ul style="list-style-type: none"> <li>• Government appointed National Focal Points (NFPs)</li> <li>• Senior representatives of the cooperating institutions</li> <li>• IA representatives</li> <li>• Donor representatives (and contributing international organisations)</li> </ul>
(b). Project Coordination Team	2. International recruitment of project co-ordinator, 2 technical assistants and one secretary. Procurement of computers and minor office items.	2. The Project Coordinator shall be recruited according to the rules established by UNDP. He/she will be contracted by UNIDO.

<i>Component 2: Preparation of a transboundary diagnostic analysis</i>		
1. A Transboundary Diagnostic Analysis for the Gulf of Mexico Large Marine Ecosystem	<ol style="list-style-type: none"> <li>1. Identification of national specialists to be involved in the TDA process.</li> <li>2. First briefing meeting of all national experts in the TDA/SAP methodology. Scoping exercise to identify priority issues.</li> <li>3. National information gathering according to the UNEP methodology.</li> <li>4. Second meeting to examine environmental and socio-economic impacts of the identified problems.</li> <li>5. Regional consultations on specific technical issues such as LME variability, contingency planning, conservation areas</li> <li>6. National information gathering exercise for the causal chain exercise and review of institutions/laws and current level of implementation.</li> <li>7. Final meeting to complete the causal chains and the draft TDA.</li> <li>8. Presentation of the draft TDA to members of the Steering Group for additional comments (meeting not required)</li> </ol>	<p>1a. The specialists recruited will be recommended by the SG in consultation with all relevant national organisations. . They will be leading experts in the following fields:</p> <ul style="list-style-type: none"> <li>• Marine/coastal environmental science</li> <li>• Resource economics</li> <li>• Institutions/laws.</li> </ul> <p>2 – 4. Project Coordinator. 5. Project Coordinator, in consultation with the NFPs, specialised institutions and specialist international organisations 6 – 7 Project Coordinator</p>

<i>Component 3: National and regional dialogues and the preparation of a draft SAP</i>		
A draft Strategic Action Programme	<ol style="list-style-type: none"> <li>1. First regional workshop for SAP design. Review of conclusions of TDA and preparation of discussion document including proposed options for regional/national actions to overcome the problems identified in the TDA.</li> <li>2. National consultation and consensus-building process examining regional/national/sectoral/local actions that may be included in the SAP. It is anticipated that there will be stakeholder meetings examining offshore and coastal issues.</li> <li>3. Second regional consultation to examine national inputs and agree on a draft SAP.</li> <li>4. Additional national workshop to present draft SAP to all relevant stakeholders.</li> <li>5. Donor consultation meeting to discuss arrangements for co-financing implementation of the SAP.</li> <li>6. Official submission of the SAP to governments for endorsement.</li> </ol>	<ol style="list-style-type: none"> <li>1. The workshop will be convened by UNIDO and will include representatives of each country as follows: <ul style="list-style-type: none"> <li>• National Focal Points</li> <li>• National Technical Experts.</li> </ul> The SG may wish to include additional experts if necessary. </li> <li>2. Project Coordinator, in consultation with the NFPs</li> <li>3. As in (1) above.</li> <li>4. Project Coordinator, National Focal Points</li> <li>5. Project Coordinator, National Focal Points, IAs, bilateral donors</li> <li>6. NFPs</li> </ol>

<i>Component 4: Development of a GEF Project Brief</i>		
1. A project brief for submission to the GEF Council.	<ol style="list-style-type: none"> <li>1. Development of proposed elements for a Project Brief by the project team.</li> <li>2. Second Steering Group meeting to review TDA/SAP and all proposed elements of the Project Brief including the calculations of incremental costs.</li> <li>3. Completion of the Project Brief by the project team.</li> <li>4. GEF National Focal Point endorsement of PB.</li> <li>5. Submission to the IAs.</li> </ol>	<ol style="list-style-type: none"> <li>1. Project team with additional expertise as considered appropriate by UNIDO</li> <li>2. See Component 1, Activity 1.</li> <li>3. Project Co-ordinator</li> <li>4. NFPs</li> <li>5. UNIDO/UNDP</li> </ol>

	<p><b>(c) PDF-B outputs</b></p> <p>The outputs of the PDF-B will be:</p> <ol style="list-style-type: none"> <li>a. An agreed upon TDA defining the key problems, issues and threats and identifying priorities, options and alternatives for the integrated management of the GOM/LME.</li> <li>b. A mechanism for consultation and co-ordination among the various stakeholders participating in the management of the GOM/LME including national governments: various agencies within them; their technical, scientific and management staff; coastal communities; NGO's and other groups, universities, the private sector – including oil and gas, mining, fisheries and tourism industries; and various other beneficiaries of the sustainable use of the GOM/LME.</li> <li>c. An agreed draft SAP for the integrated management of the GOM/LME.</li> <li>d. Outlines of a series of activities and projects (including ongoing monitoring and assessment) to be funded by national governments and donor agencies, together with a financing plan.</li> <li>e. One of more draft GEF Project Brief(s).</li> </ol>
	<p><b>16. ELIGIBILITY</b></p> <p>All three countries are GEF members. Cuba and Mexico are eligible for GEF financial support under Section 9(b) of the GEF Instrument.</p> <p><i>International Waters</i> This proposal is consistent with the GEF Operational Strategy of April 1997, especially as laid out in Operational Programme 9 – Integrated land and water multiple focal area programme. This operational programme is designed to focus on the development of integrated land and water resource management practices for particular geographical areas. It has strong connections with the other GEF Focal areas, particularly through its emphasis in preventing land degradation. The particular emphasis on preventative measures distinguishes the approach used from OP8 (Waterbody based operational programme). It also allows for policies to be developed across entire countries or regions, irrespective of whether or not single drainage basins are targeted. GEF intervention focuses on transboundary issues (including transaction costs for addressing them) but also serves to catalyse co-financing in order to develop a comprehensive approach. It also offers the possibility of financing the incremental costs of implementing some of the measures adopted. The project may also generate GEF interventions in other areas, particularly OP2 (Biodiversity – Coastal, Marine and Freshwater Ecosystems) but also OP12 (Integrated Ecosystem Management).</p> <p><i>Community Involvement.</i> Project activities will link with actions being undertaken by both government and non-governmental organisations. Full stakeholder participation is envisaged throughout the process of project development and implementation. Increasing public awareness of the problems, their causes and solutions will be a key to project sustainability as will environmental education of younger generations.</p>
	<p><b>17. NATIONAL LEVEL SUPPORT</b></p> <p>The three participating countries have ongoing efforts to monitor and manage the coastal environment. Although fragmented to varying degrees, they have provided considerable baseline information. The project will provide an ecosystem support to all fragmentation and will have multi-focal areas linkages. Even actions regarding persistent toxic substances and their links to the biodiversity and pollution status of the habitat will be covered.</p>

Cuba has a highly skilled fishery science capability that is providing scientific input for national management and has achieved with success the co-ordination and development of multidisciplinary research linked to several of its marine resources. Despite a limited capability for conducting systematic surveys, Cuba can provide scientific input for national management and has achieved with success the co-ordination and development of multidisciplinary research linked to several of its marine resources. Examples of this include its lobster research programme in the SVR "Ulises" or the co-operation with scientific institutions from Mexico and USA, to study the adjacent large marine ecosystems (YUCA, Planktonic productivity, CANEK and Frontal Ecosystem projects), as well as studies on the diversity and ecology of coastal ecosystems, in particular, those linked to the rational management of mangroves.

In Mexico, the INP/SEMARNAP has laboratories in the Gulf and recently has been able to assess the status of the main marine fisheries (Sustainability and Responsible Fisheries, assessment and management). It also has moved into a more integrated environmental and institutional arrangement. One of the products of this activity is the publication on the federal register of the National Fisheries Chart, which serves as a link between the stakeholders' concerns and the fisheries administration. INP scientists have participated with Cuban and US scientists in bilateral co-operative fishery assessments. Mexican academic institutions have a long history of oceanographic research, coastal ecology and pollution studies in the region. Mexican academic institutions have a number of research field stations in the region and the 1000 ton vessel Justo Sierra. Care will be taken to work with these institutions in order to make best use of their comparative advantage where appropriate

In the United States, the Gulf of Mexico Marine Fisheries Commission united with the State and Federal Governments in providing science input to fisheries management concerns (including habitat) in state waters. NOAA's Southeast Fisheries Science Centre with state and university partners does likewise for offshore management through the Gulf of Mexico Fishery Management Council. The EPA-led Gulf of Mexico programme is a co-ordinating mechanism for the US states and the various Federal Agencies with responsibility in the region. Currently, it has a focus on the nutrient enrichment impacts on enhancing the "dead zone" of hypoxia off the Mississippi River mouth.

There are international co-ordinating efforts taking place that by being strengthened and enhanced can serve as building blocks in Gulf of Mexico Large Marine Ecosystem Programme. The Instituto Nacional de Pesca (INP) in Mexico and Centro de Investigaciones Pesqueras (CIP) in Cuba, have had joint scientific cooperation on fisheries assessment since 1974. INP and the U.S. Southeast Fisheries Science Centre (SEFSC) have an international agreement - Mexus-Golfo that has served to exchange fishery science study results and to conduct co-operative work, since 1976. For example in 1998 a co-ordinated shark long line cruise covered waters in the U.S., Mexico and Cuba under the Mexus-Golfo aegis. Annual U.S. - Mexican Fisheries Talks provide a basis for exchange of information and co-operation and management enforcement. Mexican officials are attending meetings of the U.S. Gulf of Mexico Fishery Management Council and exchanged information. The North American Free Trade Agreement has a Good Neighbour Environment Committee, which addresses priority cross transboundary pollution issues between the US and Mexico and also general Committee on Environmental co-operation. The EPA led Gulf of Mexico Programme which co-ordinates environmental quality efforts in the US Gulf of Mexico has reached out and invited Mexican and Cuban participation in events such as a large marine ecosystem symposium.

Finally, all three countries belong to IOCARIBE, the UNESCO-IOC Sub-commission for the Wider Caribbean (which includes the Gulf of Mexico), the Western Central Atlantic Fishery Commission (WECAFC) of FAO and UNEP's Wider Caribbean Environment Program, coordinated from Kingston, Jamaica. IOCARIBE serves as a co-ordinating organization for ocean science in the region to provide the basis for management decision. The network that IOCARIBE has established is strong, but the lack of financial resources has prevented extensive, science-based products for management. WECAFC has served as a forum for discussion and exchange on fishery management, but lacks the capacity for implementation. UNEP's Wider Caribbean Regional Sea Programme covers a very large geographical area (33 States and Territories) and has funding constraints but has negotiated important legal agreements including the 1985 Cartagena Convention and its SPAW (Specially Protected Areas and Wildlife) Protocol that entered into force in 2000.

## 18. JUSTIFICATION FOR A PDF-B GRANT

### Urgency

This proposal is consistent with the GEF Operational Strategy of February 1996. It falls within the Integrated Land and Water Multiple Focal Area Operational Programme No. 9 and conforms to the requirements for this Programme laid out in the draft Operational Guidelines for International Waters projects of the GEF. The project seeks to create a co-operative framework, together with the necessary capacities, by which the three countries, which share the ecosystem can address both the imminent threats to the ecosystem (particularly those arising from catchment areas) and develop a joint approach to its management.

The GEF contribution is incremental: it adds to the limited existing baseline of information on the state of the GOM/LME. It will fund the additional costs of activities needed to build capacity and initiate ecosystem-wide assessments. These will contribute to a regionally integrated system for ensuring greater socio-economic benefits to the people of the region from the long-term sustainability of the environment and resources of the GOM/LME. The GEF contribution will catalyse a process of co-operative integrated management of this international ecosystem, the protection of the biodiversity of the ecosystem, and the provision of information relevant to global climate change. The GEF contribution is catalytic; it builds on and brings together the separate efforts of the participating countries and several co-operating states and institutions.

The programme is country-driven: this proposal stems from an initiative taken collectively by Mexico, Cuba and the United States of America to develop a broad regional science-based approach to solving the problems of the GOM/LME and its associated coastal areas. The programme is designed to build regional co-operation and collaboration. It will consolidate and put in place formal mechanisms for co-operation among the countries, including a framework for trilateral co-operation that will facilitate the development of focussed co-operative environmental initiatives within the region. The approach is integrated and comprehensive in addressing the full range of environmental and resource issues associated with the GOM/LME across the entire system from offshore waters through the coastal zone and associated inland areas.

## 19. GLOBAL BENEFITS

Environmentally sustainable economic development: The impacts on marine ecosystems of unsustainable practices and poor management transcend political and geographical boundaries. Countries are becoming increasingly aware of the need for cross border co-operation and catchment area and large marine ecosystem management. The development of common environmental policy approaches within these natural boundaries offer better regional and global prospects for protecting the integrity of key habitats and their biological diversity.

Conservation of Biological Diversity: In recognition of the need to protect natural habitats, the countries involved will move to strengthen regional management regimes, taking care to integrate into their wider strategies the prerogative to exploit energy resources and renewable living marine resources. They will increase co-operation among the three nations in the management of the ecosystem as a whole. In particular, they expect that with support from the GEF they can secure a broad range of national economic benefits whilst sustaining the ecological capital of the GOM/LME. This will also generate significant global environmental benefits in terms of maintenance of the ecosystem, itself with its associated biological diversity.

Value of the system for giving early warnings of global warming. Strategically placed at the source of the Gulf Stream and the crossroads of many hurricanes, small variations in the oceanography and climate of the GOM may have important consequences for climate change and storm damage in large areas of the northern hemisphere. By improving our understanding of these fluctuations, there will be significant global benefits for modeling climate change.

**Replicability:** Large Marine Ecosystems around the world and in particular those that border developing countries, experience similar stresses as described for the GOM/LME. By developing rational, cost-effective and self-financing arrangements for restoring and protecting the health of the GOM/LME and conserving its biological diversity, this project would provide a model for the development and management of other relevant LMEs worldwide. The project will, in turn, benefit from the experience of related and /or similar project that focus on Large Marine Ecosystems. On-going and pipeline GEF funded programmes for LME include: Gulf Of Guinea LME, Bay of Bengal LME, Benguela Current LME, South China Sea LME, the Yellow Sea LME, and the Sulu-Celebes LME.

**Improved water quality:** By providing a framework for the reduction and elimination of both land and ocean based sources of pollution, the proposed project will contribute to improvements in quality of the global marine environment and the living resources that depend on “clean” waters and sustainable management practices for their survival. Only transboundary priority problems related to pollution will be addressed while ones with domestic impacts would be handled through other means.

**Regional stability and security:** The formalisation of the inter-country consultative and co-ordination mechanisms to be initiated and consolidated under the proposed project will ensure joint policies and actions on environmental and living resources management and contribute to the avoidance of potential conflicts and instability in the region. Furthermore, the actions on sustainable exploitation of the living resources will lead to improved food security and promotion of greater socio-economic stability in the region.

## **20. Workplan**

The project activities will commence in September 2001 and be completed by September 2002 for submission of a Project Brief to the GEF Council by October 2002. The workplan is presented below in tabular form. Activity references are identical to those given in the table in section 15. The workplan follows a logical sequence of consultations and information-gathering and processing activities. It incorporates a stakeholder feed-back mechanism designed to ensure a fully participatory approach when building a consensus on the SAP and the eventual submission of a Project Brief to the GEF.

Component/ Activity	2001				2002											
	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<b>Component 1</b>																
1.1		X												X		
1.2	X	X	X													
<b>Component 2</b>																
2.1		X														
2.2			X													
2.3			X	X												
2.4					X											
2.5				X	X	X										
2.6						X	X	X								
2.7								X								
2.8									X							
<b>Component 3</b>																
3.1									X							
3.2										X						
3.3.											X					
3.4												X				
3.5												X				
3.6													X			
<b>Component 4</b>																
4.1.												X	X			
4.2.														X		
4.3.														X	X	
4.4.																X
4.5.																X

	<b>20. BUDGET</b>
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## 21. IMPLEMENTING AGENCY CO-ORDINATION

*The following will serve as implementing agency contacts<sup>1</sup>:*

*Lita Paparoni/Leif Pedersen*

<sup>1</sup> Full addresses should be included in all cases.