FAO/GLOBAL ENVIRONMENT FACILITY
PROJECT DOCUMENT

Countries:	Regional – Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka, and Thailand
Project Title:	Sustainable Management of the Bay of Bengal Large Marine Ecosystem (BOBLME)
GEF Project ID:	1252
FAO Project ID:	594089
FAO Project Symbol:	GCP/RAS/236/GFF
GEF Agency:	Food and Agriculture Organization of the United Nations (FAO)
Other Executing Partners:	Bangladesh Fisheries Research Institute; India Department of Animal Husbandry and Dairying (Fisheries Unit); Indonesia Directorate General of Capture Fisheries; Malaysia Marine Research Centre; Maldives Marine Research Centre; Myanmar Department of Fisheries; Sri Lanka National Aquatic Resources Research & Development Agency; Thailand Department of Fisheries
GEF Focal Area:	International Waters (IW)
Operational Programme:	8 – Waterbody-based programme
GEF Strategic Programme:	SP 2 Expand global coverage of IW foundation capacity building; GEF-4 IW Strategic Objective 1 (To foster international, multi-state cooperation on priority transboundary water concerns through more comprehensive, ecosystem-based approaches to management) and GEF 4 IW SP 1 – restoring and sustaining coastal and marine fish stocks and associated biological diversity
Duration:	Five years
Estimated Starting Date:	September 2008
Estimated Completion:	August 2013

Financing Plan:

GEF Allocation:	US$12 082 100
Co-financing:	
Norway	US$ 1 200 000
Sida (cash)	US$ 1 288 900
Sida (other)	US$ 9 522 500
Governments (CASH)	US$ 2 200 000
Governments (in-kind)	US$ 3 500 000
NOAA (in kind)	US$ 400 000
FAO (in kind)	US$ 800 000
Sub-total Co-financing	US$18 911 400
Total Project Budget:	**US$30 993 500**

Operational Focal Point Endorsement:

BANGLADESH: AHMED, Shoaib
Secretary
Ministry of Environment & Forest
Date of Re-endorsement:
06 January 2005

INDIA: MITAL, Sudhir
Joint Secretary
Ministry of Environment and Forests
Date of Re-endorsement:
16 May 2006

INDONESIA: SUMARDJA, Effendy
GEF National Focal Point for Indonesia
Ministry of Environment
Date of Re-endorsement:
5 January 2005

MALAYSIA: YAHAYA, Nadzri
Conservation and Environmental Management Division
Ministry of Natural Resources & Environment
Date of Re-endorsement:
19 January 2006

MALDIVES: MAJEED, Abdullah
Deputy Minister & GEF Operations
& Political Focal Point
Ministry of Environment, Energy and Water
Date of Re-endorsement:
8 September 2005

MYANMAR: SAN WIN, Dr
Joint Secretary
National Commission for Environmental Affairs
Ministry of Forestry, Myanmar
Date of Re-endorsement:
15 June 2007

SRI LANKA: LEELARATNE, P. M
Secretary
Ministry of Environment & Natural Resources
Date of Re-endorsement:
12 January 2005

THAILAND: PIENSTAPORN, Sornchai
Deputy Permanent Secretary
Ministry of Natural Resources & Environment
Date of Re-endorsement:
31 March 2005

Project Signatory Page

The Project is agreed by:

On behalf of BANGLADESH:

_____
Signature

_____
Name and Title (printed)

Date: _____

On behalf of MALDIVES:

_____
Signature

_____
Name and Title (printed)

Date: _____

On behalf of INDIA:

_____
Signature

_____
Name and Title (printed)

Date: _____

On behalf of MYANMAR:

_____
Signature

_____
Name and Title (printed)

Date: _____

On behalf of INDONESIA:

_____
Signature

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Name and Title (printed)

Date: _____

On behalf of SRI LANKA:

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Signature

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Name and Title (printed)

Date: _____

On behalf of MALAYSIA:

_____
Signature

_____
Name and Title (printed)

Date: _____

On behalf of THAILAND:

_____
Signature

_____
Name and Title (printed)

Date: _____

On behalf of FAO:

_____ Date: _____
José M. Sumpsi
Assistant Director-General
Technical Cooperation Department
Food and Agriculture Organization of the United Nations

EXECUTIVE SUMMARY

A great majority of the peoples of the world are dependent on coastal and marine resources for their food, livelihood and security. However, most of these resources are components of larger transboundary marine ecosystems which require multi-country approaches to their sustainable management and conservation. In this regard, the Bay of Bengal (BOB) is of particular importance given that some 400 million people live in its catchment, many subsisting at or below the poverty level. Key issues to be addressed by the project include: (i) overexploitation of living resources, (ii) critical habitat degradation, (iii) land-based sources of pollution, and (iv) the status of these critical habitats, post-tsunami, and their ability to support livelihoods in the future. The project will address one of the key barriers to resolving these issues; the lack of regional institutional arrangements to facilitate a coordinated approach among the BOBLME countries to address these issues. The project's development objective is the establishment of a Strategic Action Programme (SAP), to protect the health of the ecosystem and manage the living resources of the Bay on a sustainable basis to improve the food and livelihood security of the region's coastal population. Global benefits will accrue from the SAP's implementation which over time will lead to an environmentally healthy BOBLME. The project has been structured into five interlinking components: (i) Strategic Action Programme (SAP), (ii) Coastal/Marine Natural Resources Management and Sustainable Use, (iii) Improved Understanding and Predictability of the BOBLME, (iv) Maintenance of Ecosystem Health and Management of Pollution, and (v) Project Management. Project outcomes will include: (i) a finalized Transboundary Diagnostic Analysis (TDA); (ii) an agreed Strategic Action Programme (SAP); (iii) the establishment of permanent, partially financially-sustainable institutional arrangements that will support the continued development and broadening of commitment to a regional approach to BOBLME issues; (iv) creation of conditions leading to improved wellbeing of rural fisher communities; (v) support for a number of relevant regional and sub-regional activities; (vi) development of a better understanding of the BOBLME's large-scale processes and ecological dynamics; (vii) establishment of basic health indicators in the BOBLME; (viii) increased capacity; and (ix) long-term commitment from the BOBLME countries to collaborate in addressing complex situations confirmed through adoption of an agreed institutional collaborative mechanism. The BOBLME project is a five year project with a total estimated budget of US$31 million). Total project costs distributed by funding source are: (i) GEF (US$12.1 million), (ii) BOBLME Member States (US$5.7 million), (iii) Co-financiers (US$12.4 million), and (iv) FAO (US$0.8 million).

TABLE OF CONTENTS

ANNEXES

GLOSSARY OF ACRONYMS

ADB	Asian Development Bank
ANWP	Annual National Work Plan
APFIC	Asia-Pacific Fisheries Commission
ARWP	Annual Regional Work Plan
ASEAN	Association of Southeast Asian Nations
BCLME	Benguela Current Large Marine Ecosystem
BH	Budget Holder
BIMSTEC	Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation
BOB	Bay of Bengal
BOB-IGO	Bay of Bengal Programme Inter-Governmental Organisation
BOBLME	Bay of Bengal Large Marine Ecosystem
BOBP	Bay of Bengal Programme
CAS	Country Assistance Strategy
CBM	Community-based Management
CCRF	Code of Conduct for Responsible Fisheries
COFI	Committee on Fisheries
CORDIO	Coral Reef Degradation in the Indian Ocean
CRMP	Coastal Resource Management Project
EA	Executing Agency
EccoQos	Ecological Quality Objectives
ESCAP	United Nations Economic and Social Commission for the Asia and the Pacific
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
FAO-RAP	FAO Regional Office for Asia and the Pacific
GCRMN	Global Coral Reef Monitoring System
GEF	Global Environment Facility
GEO	Global Environment Objective
GIWA	Global International Waters Assessment
GIS	Geographic Information System
GOOS	Global Ocean Observing System
GPA	Global Programme of Action
IA	Implementing Agency
IBRD	International Bank for Reconstruction and Development
ICM	Integrated Coastal Resources Management
ICR	Implementation Completion Report
ICRI	The International Coral Reef Initiative
IDA	International Development Association
IFIOR	International Forum on the Indian Ocean Region
IMO	International Maritime Organization
IOC	The Intergovernmental Oceanographic Commission (IOC) of UNESCO
IOCINDIO	Regional Committee for the Central Indian Ocean
IOGOOS	Indian Ocean Global Ocean Observing System
IOMAC	Indian Ocean Fisheries Commission South Asian Association for Regional Cooperation
IOTC	Indian Ocean Tuna Commission
IUCN	The World Conservation Union
IW	International Waters
LME	Large Marine Ecosystem

LTU	Lead Technical Unit
MCS	Monitoring and Controlling and Surveillance
MDG	Millennium Development Goals
MIS	Management Information System
MPA	Marine Protected Areas
MTR	Mid-Term Review
NACA	Network of Aquaculture Centres in Asia Pacific
NAD	Aceh province (Indonesia), officially known as Nanggroe Aceh Darussalam
NASAP	National Scientific Advisory Panels
NC	National Coordinator
NGO	Non Governmental Organization
NIOT	National Institute for Ocean Technology
NOAA	National Oceanic and Atmospheric Administration
NRM	Natural Resource Management
NSAP	National Scientific Advisory Panels
NSC	National Steering Committee
NTF	National Task Force
OECD	Organization for Economic Cooperation and Development
OP	Operational Programme
PDO	Project Development Objective
PRSP	Poverty Reduction Strategy Paper
PSC	Project Steering Committee
PY	Project Year
RC	Regional Coordinator
RCU	Regional Coordinating Unit
RSAP	Regional Scientific Advisory Panels
RWP	Regional Work Plan
SAARC	South Asian Association for Regional Cooperation
SACEP	South Asia Co-operative Environment Programme
SAMP	Special Area Management Plan
SAP	Strategic Action Programme
SCS	South China Seas
SEAFDEC	Southeast Asian Fisheries Development Center
SIDA	Swedish International Development Authority
TDA	Transboundary Diagnostic Analysis
TOR	Terms of Reference
TTL	Task Team Leader
UN	United Nations
UNCED	United Nations Commission on Environmental Development
UNCLOS	United Nation’s Conference of Law of the Seas
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP/EAS	United Nations Environment Programme East Asian Seas
USAID	United States Agency for International Development
WB	World Bank
WFC	WorldFish Centre
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WWF	World Wildlife Fund for Nature

1. BACKGROUND

1.1 General and Sectoral Context (*Annex 1*)

For the purposes of the proposed Bay of Bengal Large Marine Ecosystem (BOBLME) Programme[1], the Bay of Bengal (BOB) region is defined as comprising the coastal watersheds, islands, reefs, continental shelves and coastal and marine waters of the Maldives, Sri Lanka, the east coast of India, Bangladesh, Myanmar, the west coast of Thailand, the west coast of Peninsular Malaysia, and the Indonesian provinces of Aceh, Riau, and North and West Sumatra. This body of water, measuring approximately 3.3 million km^2 in area, together with the coastal drainage systems, has been identified as one of the world's sixty-four Large Marine Ecosystems (LMEs) sharing a distinct bathymetry, hydrography, productivity, and tropically dependent populations.

About one-quarter of the world's population reside in the littoral countries of the BOB of which some 400 million live in the Bay's catchment area alone, many subsisting at or below the poverty level. An average of 65 percent of the region's urban population live in large coastal cities and migration towards the coastal regions appears to be on the increase.

The BOB supports numerous coastal fisheries, many of which are of significant socio-economic importance to the countries bordering the water body; an estimated two million fishers who operate primarily in coastal and inshore waters are directly employed in the sector. Included amongst these fisheries are coastal demersal, shrimp and small pelagic fisheries, as well as offshore fisheries for tuna and similar species.

A key issue facing the region's coastal fishing communities is the unsustainable harvesting of certain species, a result of the open access nature of the resource. Many fishery resources in the region are already heavily exploited and if fishing continues unregulated, the situation will likely worsen with significant adverse impacts on the large number of small-scale fishers and their families and communities dependent on these resources for their livelihoods and as a source of food security. The socio-economic implications of non-sustainable exploitation of fish stocks is exacerbated further by the illegal incursion of foreign fleets, increased competition and conflicts between artisanal and large-scale fisherman, encroachment by nationals into the territorial waters of neighbouring countries, and an alarming increase in cyanide fishing and other non-sustainable fishing practices.

A second key issue is the continued degradation of highly productive coastal and near-shore marine habitats such as coral reefs, mangroves and estuaries, and marine grass beds, all critical fish spawning and nursery areas. Immediate causes include land conversion and reclamation, direct overexploitation, accelerated sedimentation, and destructive tourism and fishing practices, as linked with the first issue. Sea-based sources of pollution include oil pollution and offshore oil and gas exploration. There are also the potential adverse impacts related to the future development of seabed minerals.

Finally and closely related to the two previous issues, are the accumulative effects associated with land-based sources of pollution that contribute to the disruption of basic processes and functioning of the marine ecosystem. These include degradation and loss of fish spawning and nursery areas, fish kills and possible changes in the LME's tropic structure. The fate and effect of pollutants has not been studied extensively but there is growing evidence to confirm

[1] The BOBLME Project is defined as the first phase of a multi-phase BOBLME Programme.

that most are deposited as estuarine sediments, while a smaller portion is flushed out to deeper waters. It is argued by some that the ecosystem's assimilative capacity on the whole has not been exceeded and that pollution problems are localized in nature. Even in these circumstances, however, cascading interactions between destabilised local areas and the larger system may create important risks. More fundamentally many uncertainties need to be resolved about the Bay's status and ecological functioning, and the lack of comprehensive, reliable data is a critical constraint to effective regional policy and management frameworks.

In addition to these long-standing and pervasive issues, the region is strongly influenced by monsoons, storm surges, cyclones and other natural disasters, such as the recent tsunami, that affect coastal populations. As a result of the tsunami, in addition to the massive human tragedy and the subsequent need to rebuild and restore communities' wellbeing, given the socio-economic importance of many of the region's coastal and near-shore marine habitats (coastal lagoons, mangroves, and coral reefs) as sources of livelihood to some of the most heavily impacted sectors of society (namely, poor, rural coastal communities), there is also a need to assess the status of these 'high social dependence' habitats and ascertain the implications and management options for the future livelihoods of affected populations.

Major root causes and drivers underlying these issues include population growth and changing demographics, unabated pressure on the primary sector to feed exports due to continued demand for increased foreign exchange, a growing and diversifying industrial sector, and the undervaluing of the natural resources and the environmental "goods and services" provided by the coastal and near-shore marine ecosystems.

A major barrier to resolving these issues effectively, responding to these drivers, is the lack of regional institutional arrangements to facilitate a coordinated approach among the BOBLME countries. A second critical barrier, closely related to this, is the weak and/or inappropriate policies, strategies and legal measures that characterize much of the region. Where these do exist, they are rarely enforced. Other major constraints include lack of alternative livelihoods, weak institutional capacity at national levels, insufficient budgetary commitments, and lack of community stakeholder consultation and empowerment.

The BOBLME countries are well aware of these issues, underlying causal factors and barriers to their resolution. In response they have demonstrated significant levels of commitment to address many of these problems, both in terms of national actions as well as their participation in a number of conventions and other legal instruments which address one or more of the issues (see section 2.5 below and ***Annex 1***). The substantial national participation among the eight BOBLME countries during the project preparation process indicates that this commitment remains strong.

Despite the large number of international, regional and sub-regional institutions and programmes operating in the Bay, none have the mandate, geographical scope and/or capacity to support an integrated initiative based on an LME approach, particularly one that addresses the shared and common issues and barriers characteristic of the BOB. However, it is equally clear that the proposed BOBLME Programme cannot resolve the aforementioned issues in isolation. Rather it must build on past experience and build with existing institutions and activities in the region, particularly on the exchange of data and information related to coastal and marine environment and fisheries issues, and on the sharing of experience, lesson-learning and capacity building, to achieve any significant lasting impact.

1.2 Project Background

In view of the importance of the Bay of the Bengal Large Marine Ecosystem (BOBMLE) to the health, wellbeing and livelihoods of the millions of people living in the BOBLME region, the Advisory Committee of the Bay of Bengal Programme (BOBP) requested the Food and Agriculture Organization of the United Nations (FAO) to assist in the development of a project proposal that could be submitted to the Global Environment Facility (GEF) and other donors for funding. The BOBP was a long-term regional fisheries programme in which Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka and Thailand were participating, with Myanmar having observer status. In its first two phases, the BOBP aimed to improve the socio-economic conditions of the small-scale fisherfolk in the member countries through the development and promotion of new and innovative techniques and technologies. The third phase of the project was designed to address more directly the serious management problems facing the Bay's fisheries. It assisted the national institutions responsible for fisheries management in setting directions and accelerating the development of sound fisheries management polices and practices. During this latter phase, the BOBP countries increasingly recognized the need to manage the coastal and marine resources, including the environmental threats to those resources, in a coordinated, comprehensive and integrated manner.

The Global Environment Facility (GEF) is in a unique position to build on and strengthen existing programmes and partnerships in the region through promoting the development of a transboundary perspective and approach to addressing critical issues characteristic of the BOBLME. Project preparation resources (PDF-B) were approved by the GEF Secretariat to prepare the project "Sustainable Management of the Bay of Bengal Large Marine Ecosystem (BOBLME)". FAO, the World Bank (as Implementing Agency), the Swedish International Development Agency (Sida), and the National Oceanic and Atmospheric Administration (NOAA) also supported this initiative in which all the Bay of Bengal countries participated. The PDF-B and Supplemental Block B grants, and associated co-financing, have been used to: (i) put in place national and regional coordinating mechanisms to ensure both broad-based stakeholder participation in the preparation of the project and its future cost-efficient implementation; (ii) prepare national baseline reports; (iii) prepare a framework Transboundary Diagnostic Analysis (FTDA); and (iv) formulate the Project Document for consideration by GEF and other donors for possible financing.

A key input into project preparation were the findings, recommendations, and consensual agreements reached stemming from a process that supported the development of the project's draft Framework TDA (FTDA). Using PDF-B funding, this process involved: (i) the establishment of a Project Steering Committee; (ii) the establishment of national task forces and national steering committees, (iii) a comprehensive literature review, (iv) preparation of national reports, (v) national consultations, (vi) regional thematic papers, (vii) international peer review, and (viii) experts' meetings. This process provided the opportunity for country participants to break down complex transboundary situations into smaller, more manageable components and activities; it was critical because the process served to identify the previously mentioned priority issues, barriers, and needed measures to address the issues and subsequently guided the development of the proposed project structure and activities. A list of key documents, chronology, and major findings of the FTDA can be found in ***Annex 8*** of the draft Project Brief. Selected documentation in support of the BOBLME Project preparation process has been posted on the website (http://www.fao.org/fi/boblme/website/index.htm).

The three issues identified as priorities by the countries through the FTDA process, capable of being analyzed through scientific, quantifiable, and politically neutral analyses of

transboundary environmental problems were: (i) overexploitation of living resources, (ii) critical habitat degradation, and (iii) land-based sources of pollution. These were identified by the countries from the longer list of transboundary concerns that may have environmental effects but were not viewed as environmental problems per se (i.e., livelihoods, food security, absence of legal mechanisms and inadequate enforcement). These latter concerns were viewed as more appropriately analyzed as causes of the three aforementioned environmental concerns, and would be better addressed accordingly under their respective category for each of the three overarching environmental concerns in the TDA.

Once priorities were agreed to by BOBLME countries, a three day participatory logical framework workshop provided the basis for identifying a series of relevant activities to be supported under the project.[1] The common features among these activities were to: (i) promote the development of regional and sub-regional collaborative approaches among the 8 BOBLME countries to address one or more issues identified as transboundary priorities (either shared or common)[2]; and (ii) provide critical inputs in the form of experience and "lessons-learned" and "products" to inform the SAP formulation process and "enrich" and strengthen the SAP itself (see below).

The draft Project Brief, in the format of a World Bank Project Appraisal Document, was reviewed, commented upon and endorsed by the countries at the Second Regional Workshop which was held in Colombo in October 2004. At this time, a working group of the countries proposed a combined level of approximately US$5.5 million, consisting of about US$2 million in cash and US$3.5 million in kind, as the total country contributions over the six year first phase project.

During the preparation of the FTDA, the occurrence of natural hazards generally and tsunamis specifically, were not identified as a priority. This situation changed dramatically on 26 December 2004. In response to the changed circumstances in the region, the BOBLME proposal, was reassessed to ascertain where meaningful and compatible contributions could be made in a timely manner.

An important consideration will be to establish a new, post-tsunami environmental "baseline" under the TDA subcomponent through a comprehensive assessment of critical coastal habitats. This will provide a key input into other on-going and proposed coastal community and livelihood assessments to ascertain impacts on future income and wellbeing of affected populations. Dependent on the priorities of the countries, the possible inclusion of a second tier Early Warning System (EWS), designed to expedite the transfer of hazard relevant information from national information nodes (typically located in the capital cities) to vulnerable rural coastal communities, could be considered. Beyond these contributions, there exist a number of project activities that provide additional opportunities to equip rural coastal communities in the BOBLME region to better anticipate and respond to the occurrence of storm surges, cyclones and other natural hazards, including future tsunamis, and to the effects of climate change.

[1] See summary of 1st Technical Meeting held in Bangkok 27 -29 April, 2004 on the BOBLME website (http://www.fao.org/fi/boblme/website/index.htm).

[2] "Shared" issues are transboundary issues between to or more states while common issues are similar, occurring among all the 8 BOBLME countries but not necessarily transboundary in nature.

Following a revision of the Project Brief to take into account the impact of the tsunami, **the project was approved in the February 2005 Inter-sessional Work Programme by the GEF Council.**

Following the tsunami, the priorities of the BOBLME countries and donor communities were changed, in the short-term, to emergency relief and rehabilitation assistance. The mobilization of co-financing for the BOBLME programme therefore took longer than expected. Nonetheless, these events have also highlighted the importance of building strengthened capacities, and, in light of the impact on resources and livelihoods, the need to place emergency responses within an effective sustainable resource management context. The need for a sound regional institution or forum for consultation among BOBLME countries and with donors and other partners to discuss a range of issues facing BOBLME countries in the medium and long term also became evident. The countries reaffirmed the high priority of the BOBLME Programme at the Project Appraisal Meeting which was held in Bangkok in June 2007.

1.3 GEF Eligibility Criteria

Country Eligibility

In accordance with paragraph 9(b) of the Instrument for the Establishment of a Restructured GEF, all of the BOBLME countries are eligible recipients of FAO, World Bank (IBRD and/or IDA) and/or UNDP technical assistance.

Programme and Policy Conformity

The BOBLME project objectives and outcomes are fully consistent with relevant provisions in the GEF Operational Strategy, and specifically with the Waterbody-Based Operational Programme (OP#8). With respect to OP 8, the project will: (i) serve as a catalyst in the implementation of a more comprehensive, ecosystem-based approach to managing international waters as a means to achieve global benefits associated with countries obtaining a better understanding of the BOBLME environmental issues and working collaboratively to address the same issues; (ii) build capacity in existing institutions (or if appropriate, develop capacity through the establishment of new institutional arrangements); and (iii) implement measures that address priority transboundary environmental concerns.

The project also addresses one of the key gaps identified in the recent review of the GEF's International Water's (IW) portfolio, i.e., “stabilizing and reversing fisheries depletion in LMEs through ecosystem-based approaches". This is a central theme running through the proposed project's components.

Moreover, the project addresses IW Strategic Priority (SP 2) identified in the GEF Fiscal Year (FY) 04-06 Strategic Business Plan (BP). SP 2 cites the need to expand global coverage of foundation capacity building designed to address the aforementioned programme gaps.

Finally, the project is fully in support of GEF-4 IW priorities as identified in GEF’s Focal Area Strategies and Strategic Programming for GEF-4. In particular, the project addresses GEF IW Strategic Objective 1 (To foster international, multi-state cooperation on priority transboundary water concerns through more comprehensive, ecosystem-based approaches to management) and GEF-4 IW Strategic Programme 1 - Restoring and sustaining coastal and marine fish stocks and associated biological diversity.

Specifically, for the fisheries sector GEF-4 will support: (i) policy, legal, and institutional reforms for meeting WSSD targets for sustainable fisheries; (ii) investments in alternative livelihoods to reduce stress on fisheries; (iii) ecosystem approaches to sustainable fisheries management and habitat restoration and conservation (including marine protected areas); (iv) technical assistance in developing sustainable distant fishing fleet agreements; and (v) engagement of the business community in solutions.

Under the theme of degradation of coastal resources and processes, GEF-4 will support among other priorities, actions directed at reduction of land-based pollution of coasts and demonstrations of integrated coastal management.

2. RATIONALE

2.1 Problems/Issues to be Addressed

A great majority of the peoples of the world are dependent on coastal and marine resources for their food, livelihood and security. Most of these resources are also components of larger transboundary marine ecosystems which require multi-country approaches to their sustainable management and conservation. In this regard, the BOB is of particular importance given that some 400 million people live in its catchment, many subsisting at or below the poverty level. Further degradation of the coastal and marine resources of the Bay is likely to have a severe impact on quality of life and on economic growth prospects in the region; an impact that is likely to be disproportionately felt by the poor who, directly or indirectly, depend on these aquatic systems for income generation and are least able to adapt to adverse changes in water quality, fish catch and other aquatic resources.[1]

Key issues to be addressed by the project include: (i) the unsustainable harvesting of selected regional/sub-regional fish species; (ii) the continued degradation of highly productive coastal and near-shore marine habitats such as coral reefs, mangroves and estuaries, and marine grass beds, all critical fish spawning and nursery areas; (iii) the accumulative effects associated with land-based sources of pollution that are contributing to the disruption of basic processes and functioning of the marine ecosystem; (iv) the need to understand the status of such critical natural habitats associated with the recent tsunami, to include implications for the future livelihoods of affected populations; and (v) the lack of regional institutional arrangements to facilitate a coordinated approach among the BOBLME countries to address these development and resource issues.

2.2 Stakeholders, Target Beneficiaries and Public Participation (Annex 7)

The major stakeholders relevant to project objectives can be classified into three groups: regional, national and local stakeholders. Regional stakeholders include multi-lateral/bi-lateral development agencies and programmes, regional development banks, and international NGOs. National stakeholders include national and state government agencies, civil society organizations, NGOs, private foundations, private sector organizations, and academic institutions. Local/beneficiary stakeholders comprise local government agencies, commercial and rural fishers and their families, school teachers, students and rural youth, coastal/marine

[1] This overall development hypothesis has wider implications beyond the BOB region. At a G-8 ministerial meeting in May 2003 in Evian, France, delegates concluded that "global sustainable development and poverty reduction requires a healthier and more sustainably managed oceans and seas". The G-8 and UN leaders promised to maintain the productivity and biodiversity of important and vulnerable marine and coastal areas.

tour operators and their clients, local environmental and social/cultural NGOs, and other local citizens.

During project preparation these stakeholders were closely involved through participation in: (i) national consultations and workshops, (ii) meetings of the national task forces, (iii) the development of national reports, (iv) regional workshops and technical meetings, and (v) meetings of the Project Steering Committee.[1]

2.3 Project Justification

One of the key barriers to resolving the coastal/marine living natural resource issues characteristic of the BOBLME is the lack of regional institutional arrangements to facilitate a coordinated approach among the region's countries. Other major constraints include: weak and/or inappropriate policies, strategies and legal measures that characterize much of the region; lack of alternative livelihoods; weak institutional capacity; insufficient budgetary commitments; and lack of community stakeholder consultation and empowerment.

Without means to address these constraints, these major issues of development and resources cannot be effectively tackled, and significant further degradation, loss of capacity, economic and livelihood losses will result. Such is the nature of the issues, that only an integrated regional approach will be effective. While there already exists a number of international, regional and sub-regional institutions and programmes operating in the Bay, none have the mandate, geographical scope and/or capacity to support a broad initiative based on an LME approach; particularly one that addresses the shared and common issues and barriers which are characteristic of the BOB. The proposed project, as the first phase of a multiple phase programme, addresses the barrier of building an overarching regional capability and will support the development of a Strategic Action Programme to guide future interventions and mobilize needed funding to support their implementation in subsequent phases.

2.4 Project Benefits

Under the GEF Alternative, the benefits generated from would include both national and global benefits. National benefits include: (i) diversified livelihoods and improved wellbeing among small-scale fisher communities; (ii) dependable, long-term sustained national production of selected transboundary fish stocks for BOBLME countries; (iii) increased understanding and strengthened national programmes in BOBLME-relevant sectors; (iv) establishment of national environmental "health" indicators for coastal habitats/waters; (v) preparation of national Strategic Action Programmes; (vi) pilot testing of cost-recovery mechanisms applicable to national activities; (vii) increased national awareness of other BOBLME relevant activities; and (viii) a financial, socio-economic, and equipment/infrastructure needs assessment following the tsunami event of 26 December 2004 (see complete list of national benefits in the Incremental Cost Matrix below). Global benefits include: (i) removal of barriers to creating a more focused, regionally coordinated effort to address transboundary issues in the BOBLME; (ii) updated assessment of critical coastal/marine habitat of global importance; (iii) resolution of selected priority issues (e.g., management of selected regional fish stocks, pollution, and management of critical habitat whose boundaries extend beyond one or more political jurisdictions); (iv) increasing exchange

[1] A record of the aforementioned events can be found in Annex 8 of the Project Document. Selected documentation in support of the BOBLME project preparation process has been posted on the website (http://www.fao.org/fi/boblme/website/index.htm).

and application of shared experiences and expertise within the region; (v) increasing public awareness of the significance and technical knowledge of the status and processes of the BOBLME; (vi) developing or enhancing regional and/or local solutions among BOBLME countries; and (vii) achieving economies of scale and cost advantages which accrue from addressing certain problems in a collaborative fashion.

2.5 Country Drivenness

As noted, the BOBLME countries are well aware of the aforementioned issues, causal factors and barriers to their resolution and in response have demonstrated significant levels of commitment to address many of them. Of the many relevant regional and international instruments related to Agenda 21, the eight BOBLME countries have demonstrated a high degree of participation (Table 1). Moreover, most of the participating countries were actively involved in the Bay of Bengal Programme (BOBP), a regional fisheries programme which was implemented in three phases over the period 1979 – 1999. The substantial national participation among the eight BOBLME countries during the project preparation process indicates that this commitment remains strong.

In addition to this past work, the first phase project of the BOBLME Programme will also assist participating countries to meet targets identified under WSSD 2002 Plan of Implementation. These include:

- The development and implementation of national and regional Plans of Action to put into effect the International Plans of Action (IPOAs) on Illegal, Unreported and Unregulated Fishing by 2004 and on fishing capacity by 2005 (#30d);
- The application of the ecosystem approach by 2010 (#29d);
- The restoration of depleted stocks by 2015 (#30a);
- The establishment of “representative networks” of marine protected areas by 2012 (#31c); and
- Strengthening of regional cooperation and coordination, particularly among regional bodies (#29f).

The proposed BOBLME Programme furthermore addresses the Millennium Development Goals (MDGs) related to eradication of extreme poverty (#1a), eradication of extreme hunger (#1b), and ensuring environmental sustainability (#7), including integrating the principle of sustainable development into country policies and programmes and reversing the loss of environmental resources.

Finally, it is very important to note that the BOBLME countries’ priority concerns, as identified and reconfirmed at every regional meeting, are the overexploitation of living marine resources (particularly Illegal, Unreported and Unregulated - IUU), the destruction of critical habitat, and the need to manage both on a sustainable basis. Components 2 and 3 of the project have therefore been designed specifically with a view to addressing these priority concerns by creating an enabling policy environment, and promoting, *inter alia*, the development of regional fishery management plans and collaborative management of critical habitats (fish refugia, marine protected areas).

Table 1. Selected Relevant BOBLME Conventions and Agreements

	Conventions							
Legal Instrument	**Bangladesh**	**India**	**Indonesia**	**Malaysia**	**Maldives**	**Myanmar**	**Sri Lanka**	**Thailand**
Convention on Biological Diversity	R (08/96)	R (02/94)	R (08/94)	R (06/96)	R (11/92)	R (11/94)	R (03/94)	R (01/04)
	Selected Mandate/Agreements							
UN Fish Stocks Agreement		08/03			09/00			
Jakarta Mandate on Marine and Coastal Biological Diversity	R	R	R	R	R	R	R	R
UNEPs Regional Seas Agreements/ Programme	A South Asian (1995)	A South Asian (1995)	A East Asian (1981)	A East Asian (1981)	A South Asian (1995)		A South Asian (1995)	A East Asian (1981)
Declaration and Global Programme of Action on Protection of the Marine Environment from Land-Based Activities	P	P	P	P	P		P	P
Committee of Fisheries (COFI)	M	M	M	M	M	M	M	M

Key: R (ratified); P (participant); A (adopted); M (member)

2.6 FAO's Comparative Advantage

The mandate of the Fisheries and Aquaculture Department of FAO is to facilitate and secure the long-term sustainable development and utilization of the world's fisheries and aquaculture resources. Decades of high quality work clearly substantiate FAO's position as the leading international organization in sustainable fisheries management and development. With respect to the GEF International Waters Program, FAO's areas of comparative advantage include its key responsibility for the Code of Conduct for Responsible Fisheries; enhancing institutional, planning and management capacity for sustainable fisheries; sustainable and ecosystem-based fisheries management, including in particular technical and normative measures for the reduction of environmental impact of fisheries. Relevant examples are highlighted below.

FAO was instrumental in developing the concept and framework of ecosystem approaches to fisheries management, and actively supported coastal member states in the adoption of the Convention on the Law of the Sea (1982), where two of its programmes were particularly influential: the Fritjof Nansen Fisheries Research Programme and the Fisheries Management and Fisheries Law Advisory Programme. Following development of the FAO Code of Conduct for Responsible Fisheries (CCRF) in 1995, the Organization was a primary actor in the 2001 Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, followed in 2003 by the key publication of "Guidelines for Implementation of the Ecosystem Approach to Fisheries". In 2006, related to this, the UN General Assembly requested FAO's guidance in establishing the IUU (Illegal, Unreported and Unregulated) Fishing Port State Agreement as a binding global instrument.

As the only source of comprehensive fisheries statistics, and with a major role in building fisheries management capacity at national and regional level, FAO has continuing involvement in promotion and use of fishery research in developing countries through

stimulating and supporting data collection, training in data analysis and promoting cooperation among countries on transboundary issues through the establishment of regional commissions and working groups.

In the BOB region FAO assistance to the sector dates back several decades, through a series of multi-purpose programmes and projects supported by the UNDP. The Regional South China Sea Project and the Indian Ocean Programme (IOP) served as major multi-donor launching pads for national and regional developments. The IOP gave impetus to the creation of the South West Indian Ocean Project, the Indian Ocean Tuna Commission (IOTC) and in the late 1970s the Bay of Bengal Programme (BOBP); engaging successively with small-scale fishery communities and with the emerging management issues. Its successor, the BOBP Inter-Governmental Organization, (BOBP-IGO), a member country financed IGO, works closely with FAO, particularly in small-scale fisheries and livelihoods, safety at sea, and promotion of the CCRF.

In serving its sectoral mandate, FAO is linked to an extensive array of regional and national fisheries bodies. It works closely with, and provides the secretariat for the Asia-Pacific Fishery Commission (APFIC), in turn collaborating closely with the regional fisheries organizations and related bodies. In the BOB area this includes the Southeast Asian Fisheries Development Center (SEAFDEC), which amongst several other roles implements a regional management mechanism to harmonize common policies and shared information for South China Sea countries, which also form part of the BOBLME. FAO also liaises closely with the Indian Ocean Tuna Commission (IOTC) and in matters of trade through the INFOFISH and GLOBEFISH programmes, all of which originated as FAO initiatives.

Most recently, these regional capacities, and FAO's prominent role in supporting them, were critically put to the test in responding to the massive impacts of the Asian tsunami, where it worked with partner governments to ensure that emergency responses could be properly placed within an effective longer-term sustainable resource context. This role is set to continue with assistance in coordinating resource and livelihood-based approaches in fishing communities recovering from cyclone Sidr in Bangladesh, and in helping develop practical approaches to building better longer-term security.

3. PROJECT FRAMEWORK

3.1 Project Impact

The **project development objective (PDO)** is to support the development of a Strategic Action Programme (SAP) whose implementation will lead to enhanced food security and reduced poverty for coastal communities in the BOB region, consistent and linked with a sustained resource base of good ecosystem quality.

The programme is envisaged as a long-term 12-15 year programme in two phases. A significant portion of project resources are devoted to foundational/capacity building processes for multi-country collaboration in this phase of the BOBLME Programme. This is justified by the need to overcome barriers to joint actions, particularly ones that involve different ministries in and among BOBLME countries. It is expected that once these barriers are overcome, GEF assistance may then be mobilized to support the implementation of agreed incremental costs associated with the reforms and investments that will eventually lead to measurable impacts both in transboundary waters and the fisher communities that depend on them. As a result, a significant portion of the first phase project (in terms of budget) will not

be focused at the field/community level. Nevertheless, a number of activities are designed to address issues, and barriers affecting their resolution, which directly impact on rural fisher communities. These include: (i) identifying sound policies leading to strengthening community-based approaches to integrated coastal resources management, (ii) empowering local communities to participate in processes and decisions associated with the development of sub-regional and regional fishery management plans, and (iii) increasing options such as access to alternative livelihood opportunities. The "lessons" derived from these activities will be fed into SAP design.

The proposed project's **global environmental objective (GEO)** is to formulate an agreed on Strategic Action Programme (SAP) whose implementation over time will lead to an environmentally healthy BOBLME. To achieve the GEO, the BOBLME project, defined as the first phase of a multi-phase BOBLME Programme, would support a series of interventions that complement relevant existing national and regional activities (the Baseline), and support the development of regional institutional mechanisms, processes, and activities designed to promote the development and implementation of a more comprehensive regional approach to the management of the BOBLME.

3.2 Project Components and Outputs

The Detailed Project Description can be found in ***Annex 4.***

The project has been structured into five interlinking components. At the national and regional workshops and Project Steering Committee meetings, the BOBLME countries stressed the need to initiate some of the priority transboundary activities to address critical issues that had been identified throughout the PDF-B process. The activities selected would furthermore contribute to the finalization of the TDA and the development of the SAP. The five components are described below, followed by a roadmap illustrating the inter-linkages between the technical components and the TDA/SAP process, and their timing as critical inputs into the finalization of the TDA and development of the SAP (Figure 1). The five components are:

1. Strategic Action Programme (SAP)
    1. TDA Preparation
    2. BOBLME Institutional Arrangements
    3. Sustainable Financing Strategy and Recommendations
    4. SAP Formulation and Adoption

2. Coastal/Marine Natural Resources Management and Sustainable Use
    1. Community-based Integrated Coastal Management (stocktaking)
    2. Improved Policy Harmonization (mainstreaming)
    3. Collaborative Regional Fishery Assessments and Management Plans
    4. Collaborative Critical Habitat Management

3. Improved Understanding and Predictability of the BOBLME Environment
    1. Improved Understanding of Large-scale Processes and Dynamics affecting the BOBLME
    2. Marine Protected Areas in the Conservation of Regional Fish Stocks
    3. Improved Regional Collaboration

4. Maintenance of Ecosystem Health and Management of Pollution
    1. Establishment of an Effective Ecosystem Indicator Framework
    2. Coastal Pollution Loading and Water Quality Criteria

5. Project Management, Monitoring and Evaluation, and Knowledge Management
    1. Establishment of the RCU
    2. Monitoring and Evaluation System
    3. Project Information Dissemination System

During project implementation, stakeholder participation is included in all project components at varying levels of intervention. At the community level, local participation is specifically identified and costed as key inputs into the: (i) "stocktaking" activities (subcomponent 2.1); (ii) local capacity improvements as part of policy "mainstreaming" (subcomponent 2.2); (iii) development of all project-supported fishery management and critical habitat plans (subcomponents 2.3 and 2.4, respectively); and (iv) case studies and development of guidelines associated with assessing the role of fish refugia in the management of fish stocks in the BOBLME (subcomponent 3.1). Consultations at the national level will be ensured through the creation of project-wide National Coordinators and Project Task Forces. National consultations are the "heart" of the processes leading to the finalization of BOBLME institutional arrangements (subcomponent 1.2) and the development of an agreed Strategic Action Programme (Component 1). Specific national consultations have also been included and costed as workshops (subcomponent 2.1), national fishery task forces (component 2.3), and commissions (2.4). Finally, at the regional level a number of workshops and consultations will be supported across many of the components, as well as the project-wide regional collaboration supported under the improved BOBLME "predictability" subcomponent (3.3) and information dissemination subcomponent (5.3).

Component 1: Strategic Action Programme (US$5.4415 M, GEF US$2.7332 M). The objective of the component is to prepare a Strategic Action Programme (SAP) whose implementation will ensure the long-term institutional and financial sustainability of the BOBLME Programme. The activities fall into four subcomponents:

Subcomponent 1.1 TDA Preparation: The objective of the subcomponent is to build on the BOBLME's existing draft Framework Transboundary Diagnostic Analysis (FTDA) and complete the programme's TDA. To achieve these objectives, the subcomponent would support the following activities: (i) finalize the existing draft FTDA (currently being reviewed by BOBLME countries), (ii) address critical data gaps identified by the FTDA, (iii) identify and incorporate recent post-tsunami assessments of critical coastal/marine habitats affected by the event, (iv) prepare a draft TDA, (v) public consultations, (vi) finalization of the TDA, and (vii) government adoption of the TDA.

Subcomponent 1.2 BOBLME Institutional Arrangements: The objective of the subcomponent is to identify, agree and establish permanent institutional arrangements ensuring the long-term management of the BOBLME through the implementation of the SAP (see below). To achieve these objectives, the subcomponent will support the following activities: (i) comprehensive national and regional institutional analyses, (ii) consultative workshops, (iii) regional meetings, and (iv) an inter-ministerial conference.

Subcomponent 1.3 Sustainable Financing Strategy and Recommendations. The objectives of the subcomponent are to: (i) identify a possible financing mechanism(s) to fund, at least

partially, the annual recurrent costs of an agreed on BOBLME management structure ensuring the continued beneficial impact of the BOBLME Programme; and (ii) assist BOBLME countries to prepare for the mobilization of financial resources and development of financial mechanisms for implementing specific actions that will be developed, agreed and included under the SAP (see below). To achieve these objectives, the subcomponent would support the following activities: (i) establish an ongoing dialogue and relationship with potential partners and stakeholders, (ii) establish appropriate regional and national institutional mechanisms to generate and administer programme-related funds, and (iii) the testing of activity-specific financing mechanisms designed to cover their respective recurrent costs.

Subcomponent 1.4 SAP Formulation and Adoption: The objective of the subcomponent is to support the process leading to the formulation of an agreed Strategic Action Programme (SAP). To achieve these objectives, the subcomponent would support the following activities: (i) establishment of national (and a regional) SAP teams, (ii) review of previous experiences associated with SAPs, (iii) reaching consensus on ecological quality objectives (EcoQOs), (iv) political consultations, (v) preparation of national SAPs, (vi) preparation of the draft regional SAP, (vii) regional consultations, (viii) finalization of the SAP, (ix) national endorsements, (x) adoption of BOBLME governments, and (xi) publication and dissemination.

Expected Outputs: (i) a Transboundary Diagnostic Analysis (TDA) to include recent studies and information collected on the post-tsunami, environmental baseline of critical habitats suitable to provide the basis to ascertain if programme-supported activities are contributing to a healthy BOBLME; (ii) agreed to permanent institutional arrangements to manage and implement the BOBLME SAP; (iii) a study and series of recommendations leading to a partially, financially-sustainable BOBLME SAP; and (iv) a comprehensive SAP whose implementation will lead to a more healthy BOBLME and management of the living resources on a sustainable basis to improve the food and livelihood security of the region's coastal population.

Component 2: Coastal/Marine Natural Resources Management and Sustainable Use (US$14.4615 M, GEF US$5.1568 M). The objective of this component is to promote the development and implementation of demonstrative regional and sub-regional collaborative approaches to address priority common and/or shared natural resource issues which affect the health and status of BOBLME. Results and outputs of the various activities described below will serve as inputs into the finalization of the TDA and into the development of the SAP. The activities fall into four subcomponents:

Subcomponent 2.1: Community-based Integrated Coastal Management. The objective of the subcomponent is to identify and evaluate the large and diverse body of information and experience associated with promoting: (i) community-based fisheries and habitat management; (ii) co-management; and (iii) the creation of alternative livelihoods among fisher communities in the region; activities designed for purposes of reducing impact on coastal resources.[1] Specifically this subcomponent will complete a "stocktaking" exercise of the extensive experience in the BOBLME region and distil "lessons learned" to be used as a basis for supporting the future "mainstreaming" through activities supported under a subsequent BOBLME phase. To achieve these objectives, the subcomponent will support the following activities: (i) a literature review and synthesis of findings, (ii) stakeholder

[1] By convention, these three activities have been collectively termed "community-based integrated coastal management."

consultations through focus group encounters and facilitated workshops, (iii) site visits and development of pre-selected case studies, and (iv) completion of the analysis.

Subcomponent 2.2: Improved Policy Harmonization. The objectives of the subcomponent are to: (i) promote better understanding of the policy processes in the BOBLME region, (ii) enhance capacity in the formulation of policy, and (iii) facilitate the exchange of information on policy and legislation among regional institutional stakeholders. The outputs of the subcomponent will support the future mainstreaming activities and provide critical inputs into the Strategic Action Programme (SAP). To achieve these objectives, the subcomponent will support the following activities: (i) policy studies, (ii) national technical workshops, (iii) regional policy meetings, (iv) strengthening of capacity in local policy formulation, and (v) creation of a normative documents portal.

Subcomponent 2.3: Collaborative Regional Fishery Assessments and Management Plans. The objective of the subcomponent is to introduce and promote collaborative fisheries management approaches for selected key transboundary species through the development of regional and sub-regional management plans and harmonization of data collection and standardization. To achieve these objectives, the subcomponent will support the following activities: (i) development of a regional fishery management plan for sharks; (ii) development of sub-regional fishery management plan for Indian mackerel (Bangladesh, India, Indonesia, Malaysia, Myanmar, and Thailand); (iii) development of sub-regional fishery management plan for Hilsa (Bangladesh, India, and Myanmar); and (iv) design and implementation of a common fishery data/information system in the BOBLME.

Subcomponent 2.4: Collaborative Critical Habitat Management. The objective of this subcomponent is to promote multi-national approaches to manage and address issues affecting transboundary coastal/marine ecosystems within the broader BOBLME region. To achieve these objectives, candidate sites, the Mergui Archipelago (Thailand and Myanmar) and the Gulf of Mannar (India and Sri Lanka), were initially selected and prepared for inclusion under this subcomponent, but, due to the prevailing situation, activities are postponed. The BOBLME countries will be invited to select alternative sites during PY1 and PY2. The specific objectives for each site are to support a series of activities that will lead to the development of a bi-national collaborative institutional approach and system-wide master plan to facilitate the joint management of the respective ecosystems.

Expected Outputs: (i) a current overview and "lessons learned" of community-based integrated coastal management (ICM) projects and activities supported in the BOBLME region with accompanying specific policy recommendations; (ii) an improved policy environment and capacity to formulate policies supportive of community-based ICM; (iii) establishment of fisheries-based legislation and policy data portal; (iv) improved management of selected transboundary fish stocks through: (a) development of regional and sub-regional institutional arrangements and plans to manage selected fish stocks, and (b) a regionally harmonized fishery data base.

Component 3: Improved Understanding and Predictability of the BOBLME Environment (US$6.6241 M, GEF US$2.3147 M). The objective of the component is to support activities and participate and share information with other regional and global environmental monitoring programmes which will lead to better understanding of the BOBLME ecological functions and processes. As for component 2 above, the subcomponents and activities described below have been designed to complete gaps in information required

for the finalization of the TDA and for the development of the SAP. The component's activities are described below by subcomponent.

Subcomponent 3.1 Improved Understanding of Large-scale Processes and Dynamics affecting the BOBLME. The objective of the subcomponent is to contribute to an improved understanding of large-scale oceanographic and ecological processes controlling BOBLME living resources. To achieve this objective, the subcomponent would support: (i) an inventory and collection of relevant datasets that measure past variability in the BOBLME and its links to system productivity (e.g., data on monsoonal related phenomena, meteorology, oceanography, ocean colour, and primary productivity); (ii) completion of 8 national retrospective studies; and (iii) regional workshops to identify and assemble datasets, identify data gaps, and plan relevant studies.

Subcomponent 3.2 Marine Protected Areas in the Conservation of Regional Fish Stocks. The objective of the subcomponent is to develop a better understanding of and promote a more comprehensive approach to the establishment and management of marine protected areas (MPAs) and fish refugia for sustainable fish management and biodiversity conservation objectives. To achieve these objectives, the subcomponent would support the following activities: (i) establishment of a working group of regional experts in MPAs/fish refugia; (ii) review and updating of MPA/fish refugia classification criteria; (iii) inventory and updating of status of existing MPAs/fish refugia in the BOBLME; (iv) a gap analysis to assess effectiveness of existing system of MPAs in: (a) conserving biodiversity of global importance, and (b) providing critical habitat for priority transboundary fish stocks; (v) supporting studies; (vi) establishment of common regional data requirements and protocols to promote national efforts to establish MPAs/fish refugia; (vii) mapping existing and potential MPA/fish refugia sites with GIS technology; (viii) development of a regional action plan that would lead to the strengthening of existing and creation of new priority MPAs/fish refugia; (ix) training and capacity building; (x) awareness and outreach activities; and (xi) preparation of a full sized project (FSP proposal for management of existing and creation of new MPAs).

Subcomponent 3.3 Improved Regional Collaboration . The objective of the subcomponent is to establish effective partnerships with other regional and global environmental assessment and monitoring programmes that would serve to achieve a better understanding of the status and processes characteristic of the BOBLME. To achieve these objectives, the subcomponent could support participation in relevant activities and processes associated with one or more of the following programmes: (i) the Global International Waters Assessment (GIWA) of transboundary region # 55, once follow-up activities are determined; (ii) coastal module activities (e.g., sustainable fisheries and marine biodiversity) associated with the Indian Ocean Global Ocean Observing System (IOGOOS); (iii) Global Coral Reef Monitoring Network (GCRMN); (iv) strategies and measures supported under the regional implementation of the Global Plan of Action (GPA) in South Asian Seas; (v) UNEP's East and South Asian Seas Programmes; and (vi) the South Asia Co-operative Environment Programme (SACEP). In addition, the project would expect to coordinate closely with other relevant GEF-supported regional (e.g., the currently active Andaman Sea and Gulf of Mannar initiatives) and global (e.g., IW:LEARN) projects.

Expected Outputs: (i) updating of existing knowledge of large-scale processes characterizing the BOBLME and identification of critical data gaps serving as barriers to obtaining a better understanding of the relationships between large-scale BOBLME processes and dynamics and

its effect on living resources; (ii) an action plan outlining studies required to address these critical data gaps; (iii) increased understanding of the role and subsequent establishment of the necessary enabling conditions that will lead to the creation of one or more sub-regional/regional systems of marine protected areas and fish refugia in a subsequent BOBLME phase; and (iv) increased coordination and collaboration with other regional and global programmes leading to improved understanding of the BOBLME.

Component 4: Maintenance of Ecosystem Health and Management of Pollution (US$1.3398 M, GEF US$1.0172 M). The objective of the component is to support activities leading to an agreed on set of environmental indicators to measure the health of the BOBLME and the development of a regional collaborative approach to identifying important coastal water pollution issues and to develop remedial strategies. The indicators, water quality criteria, including hotspots identified, and other key information that will result from this component will feed directly into the TDA/SAP processes. The component's activities are described below by subcomponent.

Subcomponent 4.1 Establishment of an effective Ecosystem Indicator Framework. The objective of the subcomponent is to establish an agreed ecosystem indicator framework designed to measure progress toward sustaining BOBLME health. To achieve this objective, the subcomponent would support: (i) a series of national workshops to identify existing indicators of environmental health used in BOBLME countries, gaps, and development of a suite of indicators and accompanying quantitative objectives; and (ii) a regional workshop to reach consensus on system-wide indicators, thresholds and targets, and timelines for achieving objectives.

Subcomponent 4.2 Coastal Pollution Loading and Water Quality Criteria. The objective of the subcomponent is the development of a regional collaborative approach to identifying important coastal water pollution issues and to develop remedial strategies. Specifically, under this component, the BOBLME project would support the following activities: (i) meetings (Think Tanks) to develop a coastal water quality monitoring mechanism for the region, investigate and propose ambient water quality criteria, develop approaches to addressing identified pollution hotspots, and provide background documentation to support a regional mechanism for managing pollution; (ii) address identified capacity needs for monitoring and managing water quality and disseminating information; (iii) develop a systematic coastal water quality programme capable of identifying pollution "hotspots" in relation to agreed criteria, including identification of selected "hotspots"; (iv) annual technical meetings to discuss results obtained and their implications, provide support for problems encountered and share lessons learned; and (v) develop a regional strategy leading to increased public awareness, particularly among decision makers and the public, of the pollution problems in the BOBLME and impacts on the region's shared ecosystem and its resources.

Expected Outputs: (i) agreed national and regional ecosystem frameworks designed to establish a common baseline and monitoring of future environmental health of the BOBLME; and (ii) a strategy and action plan for the implementation of a regional pollution monitoring and management programme which would include: (a) a monitoring design for the region; (b) a mechanism for information-sharing; (c) agreed ambient water quality criteria; (d) an initial list of priority "hotspots" identified; (e) proposed corrective strategies and timeframes for reducing pollution loads to acceptable levels; and (f) an approach to supporting increased

awareness of pollution issues in the region and the relationships between ecosystem health and human welfare.

Component 5: Project Management, Monitoring and Evaluation and Knowledge Management (US$3.1267 M, GEF US$0.860 M). The objective of the component is to establish a cost-efficient project management, M&E, and information dissemination capacity and process leading to the successful implementation of the BOBLME Programme. The component's activities are described below by subcomponent.

Subcomponent 5.1 Establishment of the RCU. The objective of the subcomponent is to establish a regional coordinating unit (RCU) whose responsibility is to ensure the cost-effective coordination of all BOBLME supported activities leading to the finalization of the Strategic Action Programme. To achieve this objective, the subcomponent would support the following activities: (i) recruitment of a mixed international and national staff, (ii) completion of arrangements with the host-government to support the RCU office, (iii) purchase of necessary equipment, and (iv) operations. By the end of the first phase project, institutional coordination mechanisms for the long-term sustainable management of the Bay of Bengal should be agreed and put in place.

Subcomponent 5.2 Monitoring and Evaluation System. The objective of the subcomponent is to establish a cost-effective monitoring and evaluation system in conformity with existing FAO and GEF policies and procedures. To achieve this objective, the subcomponent would support the following activities: (i) recruitment of a Monitoring and Information Specialist; (ii) design (or purchase) of software to support computer-based M&E programme; (iii) provision of training to national coordinators (and outside regional contractors) to facilitate accurate data collection, formatting, and reporting to the RCU; and (iv) a mid-term and final project evaluation.

Subcomponent 5.3 Project Information Dissemination System. The objective of the subcomponent is to disseminate information to regional and global stakeholders relevant to the BOBLME and the programme. To achieve this objective, the subcomponent would support the following activities: (i) contract the Monitoring and Information Specialist; (ii) establish a dedicated website; (iii) press releases; (iv) development of promotional materials; and (v) the design and dissemination of country-specific audio-visual materials. In addition, IW:LEARN Project could include hosting learning exchanges associated with the BOBLME through the IW:Learn website (www.IWLearn.net). These learning exchanges could feature, among other themes: (i) results associated with the ICM "stocktaking" and policy "mainstreaming" subcomponents; (ii) experiences derived from promoting regional and sub-regional approaches to fisheries management; and (iii) approaches to reaching consensus on coastal water quality criteria.

Expected Outputs: (i) successful, and cost-effective execution of the BOBLME project (first phase); (ii) establishment of an accurate and transparent monitoring programme providing the basis to make timely decisions to address issues as they arise; and (iii) increased regional/global awareness about the objectives of, approach to, and "lessons-learned" derived from the BOBLME.

The relative schedules between the SAP process and selected component/subcomponent milestones have been mapped in below (Table 2).

Table 2. Selected Key Milestones between BOBLME Project Components and the SAP Formulation Process

Component/Activity					
Finalization of TDA	----------	----------→			
Financial strategy	----------	----------	----------	----------	----------→
Institutional arrangements	----------	----------	----------	---------->	
SAP formulation	National SAP teams formed Reviews of other SAPs EcoQOs initially identified	Regional SAP team formed Regional EcoQOs confirmed	Review of the project outputs/lessons-learned EcoQOs modified based on Project inputs	National SAPs prepared Policy workshops Review of the project outputs /lessons-learned	Draft SAP prepared Partner conference Ministerial conference SAP finalized
ICM "stocktaking"	Data review Stakeholder consultation	ICM "lessons learned" and recommendations Data portal established	Policy workshops Technical workshops Capacity building	----------	----------→
Collaborative regional fisheries assessments & management plans	Regional fisheries TF established Review of literature/national data bases	Stakeholder consultations Biological studies Initialization of harmonized data collection	----------→ ----------→ ----------→ Preparation of regional/subregional fishery management plans		
Large-scale processes/dynamics of BOBLME		Inventory and collection of datasets	Data gaps identified Programme of studies prepared		
MPAs and conservation of fish stocks	Regional TF established	Inventories/status update Mapping Gap analysis	FSP developed		
Regional institutional collaboration	----------	----------	----------	----------	----------→
Environmental health indicators	National workshops Regional workshop	National indicators developed	Regional indicators developed	National data sharing --------	----------→
Regional coastal pollution monitoring & water quality criteria	National TFs formed	National workshops "Hotspots" identified Protocols established		----------→	Regional monitoring strategy and action plan prepared
Project Year	**1**	**2**	**3**	**4**	**5**

3.3 Project Outcomes

Project outcomes include: (i) a finalized Transboundary Diagnostic Analysis (TDA), including the incorporation of recent post-tsunami assessments of critical coastal/marine habitats affected by the event, that would provide, *inter alia*, a location-specific assessment of critical transboundary concerns and the identification of "hotspots"; (ii) an agreed Strategic Action Programme (SAP); (iii) the establishment of permanent institutional arrangements and identification of a sustainable financing mechanism/financial arrangements that will support the continued development and broadening of commitment to a regional approach to BOBLME issues; (iv) creation of conditions leading to improved wellbeing of rural fisher communities through incorporating regional approaches to resolving resource issues and barriers affecting their livelihoods into the SAP and future BOBLME Programme activities; (v) support for a number of regional and sub-regional activities designed to: (a) promote collaborative ecosystem approaches leading to changes in sources and underlying causal agents contributing to transboundary environmental degradation (defined both as shared and common issues); (b) provide critical inputs in the form of "lessons-learned" and "products" into the development of the SAP; and (c) promote the restoration of depleted stocks; (vi) development of a better understanding of the BOBLME's large-scale processes and ecological dynamics; (vii) establishment of basic health indicators and collation of baseline and assessment data in the BOBLME; (viii) increased capacity; and (ix) long-term commitment from the BOBLME countries to collaborate in addressing complex situations confirmed through adoption of an agreed institutional collaborative mechanism.

As noted above, the project is viewed as a first phase of a long-term programme which will be needed to address an LME the size and complexity of the Bay of Bengal. For illustrative purposes, outcomes from a possible second phase and over the longer term associated with the proposed first phase project outcomes are presented below (Table 3).

Table 3. Linkages between BOBLME Programme Outcomes

Phase I (project) **Outcomes**	**Phase II Outcomes** (illustrative)	**Long-term Outcomes**
– SAP	– A series of investments, capacity building activities and technical assistance completed to address priority regional issues in the BOBLME	– An environmentally "healthy" BOBLME
– Permanent institutional arrangements	– A partially, financially self-sustaining regional body working collaboratively with other institutions in the BOBLME region – Long-term commitment of participating countries to BOBLME regional approach	– BOBLME Regional Convention
– Stocktaking and increasing local capacity to formulate policies in support of community-based ICM	– Expansion and diversification of support for relevant policy reforms in support of community-based ICM	– Improved rural fisher communities wellbeing
– Pilot collaborative	– Expansion and replication of	– Transboundary areas of critical

Phase I (project) **Outcomes**	**Phase II Outcomes** (illustrative)	**Long-term Outcomes**
approaches addressing: (i) sub-regional and regional fisheries stock management and (ii) strategy and action plan for regional pollution monitoring	successful pilot collaborative approaches in the BOBLME region – Implementation of harmonized pilot environmental monitoring activities	importance managed effectively within the BOBLME region, – Selected regional fish stocks managed sustainably – Region-wide BOBLME environmental monitoring programme in place, – Reduction in number and severity of pollution "hotspots" in BOBLME region
– Establishment of baseline, identification of key data gaps, and development of action plan leading to a better understanding of BOBLME processes and dynamics	– Completion of studies/applied research that addresses key data gaps	– Improved understanding of the BOBLME processes and dynamics
– Increased institutional capacity	– Technical centres of excellence relevant to BOBLME needs identified and strengthened	– Regional network of institutions working collaborative to address BOBLME needs

3.4 Key Indicators

Project outcomes will be measured using the following outcome and process indicators: (i) a TDA, (ii) a Strategic Action Programme (SAP); (iii) strategy and financing recommendations leading to eventual self-financing mechanism proposal; (iv) permanent institutional arrangements for the BOBLME Programme; (v) an improved environment facilitating policy reforms in support of community-based integrated coastal resources management (ICM); (vi) conditions established conducive to the creation of a permanent regional fisheries body; (vii) regional statistical data protocols; (viii) fishery management plans for selected regional/sub-regional fish stocks; (ix) an agreed set of research priorities leading to an improved understanding of BOBLME oceanographic and ecological processes; (x) development of a FSP suitable for GEF funding in support of strengthening existing and creating new marine protected areas and fish refugia; (xi) a regional network of MPA/fish refugia managers; (xii) an agreed set of indicators to measure environmental health of the BOBLME; (xiii) strategy and action plan for regional pollution monitoring; (xiv) water quality criteria agreed to by BOBLME countries for selected parameters; (xv) a regional coordinating unit (RCU) and Project Steering Committee (PSC); (xvi) a project monitoring programme; and (xvii) wide dissemination of project results and "lessons learned". See the Project Results Framework and Monitoring in ***Annex 3*** for more details.

3.5 Sustainability

The sustainability of the BOBLME Programme is addressed through the inclusion of three subcomponents in the first phase project: (i) development of the Strategic Action Programme (SAP) which will provide a framework and "roadmap" to guide future interventions, (ii) establishing permanent institutional arrangements, and (iii) developing a strategy and mechanism leading to eventual self-financing.

With respect to the SAP, a draft Framework Transboundary Diagnostic Analysis (FTDA) has already been prepared during the preparation phase of the BOBLME Programme and will be

finalized in project year PY2. This in turn will provide the factual basis for the completion and adoption of the SAP (subcomponent 1.4) in PY5. The development of the SAP will entail preparation and adoption of national-based SAPs. Moreover, the process will include widely recognized principles derived from other LME initiatives. These include: (i) full stakeholder participation and transparency, (ii) incorporation of an ecosystems approach, (iii) adaptive management and stepwise consensus building, (iv) actions that will take into account social and economic root causes of the problem, (v) a strong emphasis on accountability, (vi) inter-sectoral policy building and (vii) subsidiarity achieved through attempting to strike the right balance between regional and national actions. Finally, government commitment will be demonstrated through the adoption of the SAP as a binding agreement between governments.

The institutional subcomponent (subcomponent 1.2) of the project is designed with two objects in mind. First, it will form the basis on which future institutional arrangements in the region will be agreed to, ensuring the long-term management of the BOBLME, and the presence of a focal point for ongoing BOBLME activities that may lie outside of the first phase project-supported activities. Second, it will be a key input in the development of the SAP, so that actions in the latter can be clearly tied to those institutions appropriate and capable of taking responsibility for related actions.

Financial sustainability (subcomponent 1.3), will be achieved through the following activities: (i) detailed analysis of the planned outcome and activities of the programme that will be carried out on an ongoing or recurrent basis following the termination of the project's first phase; (ii) construction of financial sustainability models to provide structural frameworks for identifying and determining the nature and magnitude of one-time start-up costs and recurring annual expenditure requirements once specific activities have been identified for support under the SAP; (iii) identification of potential stakeholders with interest in being involved with and sustaining the outcomes and activities; (iv) an analysis of existing financing mechanisms (e.g., fund-raising, permanent/sinking endowment funds, donor funding, cost-sharing, government budget, revenue generation, etc.) that can be implemented to finance the recurrent costs of outcomes and activities to be sustained; and (v) the development and implementation of a plan of action to put into effectiveness the appropriate financing mechanisms identified.

3.6 Replicability

The main outputs of the programme's first phase will be the development of the Strategic Action Programme and the establishment of permanent and eventually, financially sustainable, institutional arrangements which, together with the countries, will be responsible for guiding and implementing the long-term BOBLME Programme. The "roadmap" that will guide future programme supported interventions will be detailed in the SAP which in turn will be based in part on the finalized TDA. As a result, most of the project resources in Phase 1 are oriented towards foundation building with more substantial field activities likely to take place in the second and subsequent phases of the BOBLME Programme. However, a key input into the development of the SAP will be the experience and "lessons learned" and "products" derived from pilot field activities supported under the first phase project. Moreover, given the size and complexity of the priority issues to be addressed by field activities in the BOBLME, project-supported interventions addressing new, collaborative approaches will necessarily have to be pilots (e.g., collaborative approaches to managing living marine resources). Based on the increased trust and confidence between the participating countries and the "lessons learned" stemming from these activities, coupled with the creation of solid foundation, many

of the subsequent activities identified in the SAP are likely to be based on the building and replicating of what has been successfully achieved under the first phase.

With respect to other LMEs, the BOBLME project design includes a subcomponent with the objective to disseminate information to regional and global stakeholders relevant to the BOBLME and the BOBLME Programme. Specific activities include: (i) establishing a dedicated website, (ii) press releases, (iii) development of promotional materials, and (iv) the design and dissemination of country-specific audio-visual materials. In addition, IW:LEARN could include hosting learning exchanges associated with the BOBLME through the IW:Learn website (www.IWLearn.net). These learning exchanges could feature, among other themes: (i) results associated with the ICM "stocktaking" subcomponent, (ii) experiences derived from promoting regional and sub-regional approaches to fisheries management and (iii) approaches to reaching consensus on coastal water quality criteria.

3.7 Assumptions and Risks

Key assumptions are: (i) a sustained institutional and financial commitment from all of the BOBLME countries to support project operations; (ii) existing political commitments to SAARC and ASEAN facilitate BOBLME countries to achieve project outcomes; and (iii) consensus is reached on a sufficiently strong institutional solution capable of ensuring long-term success of the BOBLME Programme.

While the proposed project is expected to have an overall positive impact on regional collaboration and environmental management, there are some risks associated with its implementation. These risks would likely be associated with the complexity of issues addressed by the project, the associated political risks, potentially uneven commitments and performance of participating countries and potentially inadequate support for the implementation of the Strategic Action Programme. It is felt however, that most potential risks can be identified and addressed early before beginning to affect implementation. The chances of early detection of potential issues are significantly increased due to FAO's long and deep experience in working in the BOB region.

More specifically, potential risks that may affect project success and their respective mitigation measures incorporated into project design are:

Climate Change and Natural Disasters

The Bay of Bengal is strongly affected by monsoons, storm surges, cyclones and other natural disasters, such as the tsunami that devastated the region in December 2004. In recent years, the frequency of cyclones appears to be increasing, and it is predicted that this trend will continue with changes in the global climate. Bangladesh and the Maldives are particularly susceptible to the effects of sea-level rise. According to some predictions (Myers, 1994), seven percent of Bangladesh could permanently disappear, and a much larger area could be affected by associated phenomena such as storm surges capable of reaching as much as 160 kilometres or more inland, or two fifths of the distance from the coast to the country's northern border. Global warming could also cause the monsoons to be more powerful and increase inland flooding.

In light of the number of current activities and the rapidly changing situation in the tsunami-affected areas, flexibility has been built into the project so as to allow further definition of BOBLME supported activities. An operational BOBLME would also provide the framework

for an ecosystem approach and sustainable fisheries management, in a changing environment, one in which many donors that are providing emergency and rehabilitation relief are interested in collaborating. It would also provide a forum for consultation among the countries on the range of issues that they could be facing in the medium to long term.

Lack of sustained institutional and financial commitment from one or more of the BOBLME countries to support project operations.

The project has placed significant emphasis on the analysis and development of financial sustainability mechanisms to support both the likely permanent institutional arrangements agreed to in future phases of the BOBLME Programme as well as at the field level during the first phase project implementation. "Lesson-learned" on a pilot basis from the project will be incorporated into the design of relevant activities during the SAP preparation process.

Existing political commitments to SAARC and ASEAN respectively, impede BOBLME countries from achieving project outcomes.

The BOBLME project is expected to establish close collaborative relationships with the appropriate working groups of these two regional Associations and act as a bridge in sharing of information and coordinating activities where possible.

Failure to reach consensus on a sufficiently strong institutional solution capable of ensuring long-term success of the BOBLME Programme.

The project has developed a significant subcomponent based on assessment and promotion of consultation and policy dialogue with all BOBLME countries over a three year period to ensure that all sides are heard and to provide the opportunity to reach a common position.

Sustained political and public commitment.

Addressing issues at the scale of the LME is a long-term proposition, one that may take decades before improvements in the environment are capable of being measured. To sustain efforts over the period required to observe these improvements requires a substantial commitment in terms of time and long-term provision of financial and human resources. This commitment is needed both on the part of the countries as well as the participating development partners. Decision makers and communities alike need to be kept aware and sensitized to the objectives and long-term commitments required to achieve this outcome. It is particularly important to avoid the risk of rising expectations for observable improvements in the near to medium term that cannot be met readily at the scale characteristic of the LME. It is only with broad public support that a long-term programme, such as the BOBLME, will be able to resist the pressures and possible adverse effects associated with transitory political processes and changing priorities. Project design has attempted to address this issue through the development of a wide and deep network of institutional arrangements, promotion of collaborative activities with other regional bodies, and public awareness and information dissemination activities.

Financial sustainability

Regional projects often have high overhead costs given the inherent complexity of their tasks. Well designed cost recovery mechanisms with strong enforcement can help to ensure

financial sustainability. A financial sustainability subcomponent has been incorporated into the project that will be implemented in parallel and coordinated with the preparation of the SAP to ensure that cost recovery mechanisms will be developed as activities are identified for inclusion in the latter to ensure long-term sustainability.

Most potential risks can be identified and addressed early before beginning to affect implementation. The role of FAO, as the project's implementing and executing agency, will likely contribute to increased chances of early detection of potential issues due to the Organization's long and broad experience of working in the BOB region. More specifically, the project design has incorporated several elements to mitigate these potential risks.

As mentioned above, most potential risks can be identified and addressed early before beginning to affect implementation or through the project's monitoring system which will allow for early corrective action. The chances of early detection of potential issues are significantly increased due to FAO's long experience in working in the BOB region. More generally, FAO will draw on its wide range of in-house expertise in the area of marine and coastal resources management located both in Headquarters and in the Organization's Regional Office for Asia and the Pacific, coordinated through the Project Task Force, to screen for potential issues during the implementation phase.

4. IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

4.1 Core Commitments and Linkages

Commitments

The linkage between the poor, their livelihoods and the condition of the coastal and marine resources is well recognized by both the member countries and the international community. The BOBLME countries are committed to managing the resources of the Bay of Bengal in a coordinated, comprehensive and integrated manner, and have reiterated their strong support for an LME project. The need to address the serious management problems facing the fisheries resources and for environment-related activities linking the health of the ecosystem and the fisheries resources was originally proposed in 1995 by the Advisory Committee of the Bay of Bengal Programme (BOBP). At the time, the participating countries in the BOBP included Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka and Thailand with Myanmar participating in BOBP meetings as an observer. In supporting the request by its member countries for such an initiative, FAO recognizes that this programme would provide a coordinated approach to the management of the resources of the LME, maximizing inputs from countries and complementary programmes, thereby adding value to management and policy development.

A number of donors, including Asian Development Bank, World Bank, USAID, UNDP, FAO, NGOs and bilateral donors have been active in integrated coastal resources management, biodiversity conservation, environmental capacity building and sustainable fisheries management in the region. The BOBLME project preparation process has been supported by multiple donors, including the GEF, FAO, SIDA, and the National Oceanic and Atmospheric Administration (NOAA). Additional co-financing is already being discussed as other donors and agencies become more aware of the objectives of the BOBLME.

Regional linkages

A wide range of international, regional and sub-regional institutions operate in the BOB, many of which have mandates relevant or complementary to the management of the Bay of Bengal ecosystem. These include the Asia-Pacific Fishery Commission (APFIC); Bay of Bengal Programme Inter- Governmental Organization (BOBP-IGO); Global Ocean Observing System in the Indian Ocean (IOGOOS); Indian Ocean Marine Affairs Cooperation (IOMAC); Indian Ocean Tuna Commission (IOTC); International Forum for the Indian Ocean Region (IFIOR) convened by Australia; and Indian Ocean Rim Initiative; Network of Aquaculture Centers for Asia-Pacific (NACA); the South Asian Cooperative Environment Programme (SACEP); Southeast Asian Fishery Development Centre (SEAFDEC); the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP); United Nations Environment Programme for East Asian Seas Regional Coordinating Unit (UNEP EAS/RCU).

These institutions represent a wide range of issues, many of which would form or inform important components of the BOBLME Programme, whose activities would be essential in connecting aims, knowledge and capacity strengths, and combining these through a range of partnerships, joint working processes and interactive communications to meet broad LME objectives. As earlier noted, none of these institutions in themselves have the complete scope or remit to achieve the BOBLME outcomes and the regional development consequences, but the effectiveness of the BOBLME Programme would depend significantly on this linking role, adding important value to the capacities and impacts of specific programmes.

As an example, complementary institutions/initiatives which will offer opportunities for strengthening regional institutional arrangements would include:

- SEAFDEC – who although having limited presence in the Bay of Bengal as they are focusing more on the South China Sea nonetheless are involved in the BIMSTEC assessments. They can also convene the Southeast Asian members, have some assessment capacity, and resources in capacity building and training.
- BOBP-IGO – have limited complementary programmes as a relatively new organization but BOBP-IGO can convene members and facilitate regional meetings particularly amongst its South Asian membership. There is limited technical capacity in the secretariat which would benefit from working with the BOBLME Programme.
- NACA – have excellent mechanisms to convene on issues relating to aquaculture, strong network and are generally technically competent. They have particularly valuable capacity for dealing with coastal land interactions and the management of coastal aquaculture.
- BIMSTEC - Sectoral Working Committee on Fisheries has the ability to advise on fisheries matters relevant to the Bay of Bengal area and has already demonstrated an interest to work in the issues which are to be covered by the BOBLME Programme.

The findings of a PDF-B funded preliminary study on potential options for regional coordination identified a number of international, regional and sub-regional institutions and programmes operating in the Bay area (see Annex 1 in the PRODOC). However, despite their number, none appear to have the mandate, geographical scope and/or capacity to support an initiative based on an LME approach; particularly one that addresses the shared and common issues and barriers characteristic of the Bay of Bengal. It is also clear that the BOBLME Programme cannot resolve these issues acting in isolation. Rather, it must build on past

experience and present institutions and activities in the region, including data and information collected through the numerous national and regional initiatives addressing the coastal and marine environment and fisheries issues in the Bay of Bengal to achieve any significant lasting impact. This recognized need to establish collaborative linkages with other projects and programmes in the BOB area is reflected in a subcomponent of the first phase project, intended to facilitate the formalizing of future shared commitments (subcomponent 3.3).

FAO internal linkages

The project will be linked on a daily basis to the Fisheries and Aquaculture Department (FiA) via the Fisheries Group of the FAO Regional Office for Asia and the Pacific (RAP). This group will lead the coordination of technical input and liaison with FAO headquarters based technical groups, in particular the Fisheries Management and Conservation Service (FIMF). The involvement of other services within the Fisheries and Aquaculture Department as well as with other departments within FAO (the Technical Cooperation Department with GEF Focal Point (TCI) and the Investment Centre, the Legal Office, the Natural Resources Management and Environment Department, etc.) will be planned and initiated as required via these channels. Through these linkages the project will interact with a range of national, regional and global activities within the department, benefiting from the wide and dynamic experiences and expertise available at FAO. In order to facilitate interaction with these various departments, FAO will maintain throughout the project, an internal multidisciplinary Task Force which will be called upon as a group or individually to consider project progress and advice on specific questions that arise.

At the global level, the FAO Committee on Fisheries (COFI) is a forum for all the fisheries administrations of the world and ensures that the Organization is in touch with the developing and critical issues in fisheries, while also providing guidance to the programme of work of the FAO Fisheries and Aquaculture Department. FAO through its mandate is involved in various global programmes addressing a diversity of areas within the fisheries sector. The FISHCODE programme promotes the implementation of the Code of Conduct for Responsible Fisheries. The GLOBEFISH and INFOFISH initiatives link FAO with member countries on matters of trade and information sharing. As part of ongoing and planned FAO/APFIC policy support there are a number of initiatives relevant to the BOBLME, which whilst not projectized, address serious policy concerns relevant to the Bay of Bengal member countries. These include:

- FAO/APFIC/SEAFDEC Policy analysis and awareness raising on the issues of moving fisheries capacity and expansion of tuna fisheries offshore
- APFIC work programme theme on the practical implementation of the ecosystem approach
- FAO/APFIC/SEAFDEC training and awareness in Port State measures and related instruments for combating Illegal, Unreported and Unregulated (IUU) fishing
- FAO Global Conference on small-scale fisheries

FAO is currently implementing a range of relevant inter-regional and global projects which have direct relevance to the activities of the BOBLME and in most cases are addressing issues in the Bay of Bengal countries.

Donor/Region	Project title
Global (FAO/GEF)	– Strategic Partnership for a Sustainable Fisheries Investment Fund (PROFISH)WB-WWF-FAO GCP/INT/956/WBG – Reduction of the Impact of Shrimp Fisheries GEF/FP/1100-98-15
Global (FAO & Other)	– FAO Committee on Fisheries – GLOBEFISH – INFOFISH – Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries (UNDP/FAO) – Promotion of Responsible Fisheries Management – Review of Factors Contributing to Over-Exploitation and Unsustainability in Fisheries (GCP/INT/788/JPN) – Interaction between Sea Turtles and Fisheries within an Ecosystem Approach to Fisheries Management (GCP/INT/919/JPN) – Capacity Building for Ecosystem Approach: Considering Interactions, including with Marine Mammals (GCP/INT/920/JPN) – CITES and Commercially-exploited Aquatic Species including the Evaluation of Listing Proposals (GCP/INT/987/JPN) – Towards Sustainable Aquaculture: Selected Issues and Guidelines – Various projects under the FISHCODE Umbrella including: Improving Information on Status and Trends of capture fisheries – EAF-Nansen project (Strengthening knowledge base for and implementing EAF in developing countries) GCP/INT/003/NOR).
Bay of Bengal (FAO/GEF)	– Bay of Bengal LME (PDF-B)
Bay of Bengal & Regional (FAO & Other)	– Support to Safety at Sea for Small-scale Fisheries in Developing Countries - Global with Core Activities in West Africa and South Asia – Supervision of CFC Project "Promotion of Processing and Marketing of Value-Added Tuna Products from Islands Countries in the Asian Pacific (INFOFISH) – Gap analysis of existing knowledge and data sources as compared to the needs of coastal managers for information – Supporting Development of Strategies for Enterprise Promotion and Sustainable Livelihoods in the Fisheries Sector in Orissa – Regional fisheries livelihoods programme for Southeast Asia (Cambodia, Indonesia, Philippines, Sri Lanka, Timor Leste & Vietnam) – Fisheries Management information for Planning and Sustainable Resource Use in Aceh – Joint FAO-IMO Project Proposal for Tsunami reconstruction and rehabilitation - Small Fishing Vessel Safety – Capacity building in support of Cleaner Fishing Harbours – Coordination and Technical Support Unit to Tsunami Rehabilitation and Reconstruction in Fisheries and Aquaculture – Capacity enhancement of NARA for marine resource surveys and stock assessments in coastal waters of Sri Lanka – UNDP/FAO MoU for Technical Support to Fisheries Sector of the Post-Tsunami Recovery Framework – Rehabilitation and sustainable development of fisheries and aquaculture affected by the tsunami in Aceh Province, Indonesia – Rehabilitation of livelihoods in the fisheries sector affected by the tsunami and earthquake in Indonesia – Fish marketing information for NAD, Aceh. – Organic Aquaculture in Myanmar, Thailand and Malaysia
Other regions	– Ecosystem Approach to Fisheries in the Benguela Current LME (UNDP/GEF

Donor/Region	Project title
(FAO involved)	RAF/002/G32 – UNOPS Ref. LMR/EAF/03/01) – Guinea Current LME Programme (GEF/UNEP/UNIDO) – Canary Current LME(PDF-B)
Other regions (FAO-Other)	– International Cooperation with the Nansen Programme (GCP/INT/730/NOR) – Component B: Tuna Fisheries Western and Central Pacific – Sustainable Fisheries Livelihoods Programme (SFLP) (GCP/INT/735/UK)

4.2 Consultation, Coordination and Collaboration with other Initiatives in the Region

Linkage with GEF and GEF supported programmes

During project preparation, a number of past experiences in the design and implementation of GEF supported LME initiatives under OP#8 were evaluated, including the Benguela Current LME, Baltic Sea, Canary Current and South China Sea projects. The BOBLME project preparation coordinator and/or other staff have participated in almost all of the UNESCO/IOC LME Consultative Meetings that have been organized in Paris. Consultation also occurred through extensive use of the IWLEARN website. At the Second Regional Workshop in Colombo in October 2004, a vote was taken and the BOBLME countries agreed that India, Myanmar and Malaysia would participate on their behalf in the UNDP/GEF Third Biennial International Waters Conference, to be held in Brazil in June 2005. It is expected that the BOBLME will continue to interact with the IWLEARN initiative to ensure that lessons and outcomes of the programme are integrated into the global knowledge base.

Linkages to specific UNEP programmes

FAO is executing a global project with UNEP as implementing agency on the reduction of the impacts of tropical shrimp trawling which has relevance to the Bay of Bengal shrimp trawl fisheries. FAO is also working with UNEP in the development and implementation of the Canary Current LME project. This includes the preparation of a Transboundary Diagnostic Analysis (TDA) to identify the principal shared problems and their root causes, as well as national, regional and, particularly, transboundary priorities in the region.

The BOBLME will be in close contact with UNEP/GEF project Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand (UNEP/GEF SCS). Three of the participating countries will also be participating in the BOBLME due to coastlines which border both LMEs (Indonesia, Thailand, and Malaysia). The SCS Project Manager participated in the BOBLME First Regional Workshop. This visit was reciprocated by a visit and consultation by members of the BOBLME project preparation team with SCS project office staff in Bangkok. Close collaborative consultation between the two projects is expected to continue during the implementation of the BOBLME project.

The UNEP Regional Seas programme is a partner with NOAA and IUCN in a global LME programme that seeks to monitor global progress on LMEs, to which BOBLME will contribute. In addition, the Regional Seas Programme possesses valuable data on the BOBLME that would be reviewed for the TDA-SAP process. The GPA programme, in The Hague, also possesses information relevant to the BOBLME and would be requested to assist with ensuring coherence between the GPA and the BOBLME SAP. Information exchange would be maintained with the GIWA process.

FAO has collaborated extensively with UNEP on a number of ongoing or recently completed GEF supported projects (see table below). .

Donor/Region	Project title
Global (UNEP GEF)	– Regional Seas - Marine litter project (GEF MSP) – GEF SIDS project (includes Cape Verde) – Reduction of the Impact of Shrimp Fisheries – Capacity support to Global Invasive Species Programme
Global (UNEP-Other)	– Regional Seas Programme – Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) – GIWA
Other regions (UNEP GEF)	– Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand (UNEP/GEF) – Guinea Current LME Programme (GCLME) (GEF/UNEP/UNIDO) – Support to NEPAD Environmental Action Plan – Sustainable Coastal Tourism project (GEF/UNEP/UNIDO)

Linkages to specific UNDP programmes

FAO has been providing technical support to the UNDP-GEF project "Ecosystem Approaches for Fisheries (EAF) Management in the Benguela Current Large Marine Ecosystem (BCLME. FAO also collaborates in the PEMSEA (Partnerships in Environmental Management of the Seas of East Asia) programme which aims to enable the sustainable use and management of coastal and marine resources through intergovernmental, interagency and inter-sectoral partnerships. Emphasis is placed on the demonstration of actual management actions on the ground, the success of which will strengthen government confidence and increase the commitment and investment of the public and private sectors in addressing environmental problems. Although not active in the Bay of Bengal, the project does include several BOBLME participating countries (Indonesia, Malaysia, Thailand) and their experiences from PEMSEA could be drawn upon – particularly in the area of integrating agencies for coastal planning.

At the global level, UNDP is the IA for the Globallast Project (Phase 2) executed by IMO. The selection of India as a Globallast country partner will encourage further interaction with the programme.

Donor/Region	Project title
East Asian Seas (UNDP/GEF)	– Partnerships in Environmental Management of the Seas of East Asia (PEMSEA) – Globallast Project Phase II (UNDP/IMO)

Linkages to specific World Bank programmes

The World Bank is financing a wide range of programmes globally but relatively few in the areas of marine systems and fisheries in the Bay of Bengal region. Its most significant programme in the area is the Coral Reef Targeted Research and Capacity Building for Management Project for the East Asia and Pacific Region, which aims to align the expertise and resources of the global coral reef community around key research questions related to the resilience and vulnerability of coral reef ecosystems and disseminate them in formats readily accessible to managers and decision-makers. A complementary project, the "Coral Reef Rehabilitation and Management Programme (II)" in Indonesia is also relevant. Other

complementary initiatives in the Asian region include Hon Mun MPA Marine Protected Areas Pilot Project in Vietnam and the Coastal and Marine Conservation Project in the Philippines.

FAO is executing a component of the World Bank-GEF project "Livestock waste management in East Asia", which has one of the BOBLME countries as participating member. The objective of the project is to reduce the negative local and global environmental impacts of rapidly increasing livestock production in selected watersheds in the coastal areas of China, Thailand, and Vietnam. The project will support an integrated and comprehensive approach to managing animal-induced pollution. This is complementary to the land-based pollution component of the BOBLME, and useful lesson-learning exchanges can be anticipated.

Donor/Region	Project title
East Asia & Pacific (World Bank/GEF)	– Coral Reef Monitoring Network in the Member States of the Indian Ocean
Regional (World Bank)	– Coral Reef Rehabilitation and Management programme (II) (Indonesia) – Marginal Fishing Communities Development Project (Indonesia) – Marine Biodiversity Protection and Management (Samoa) – Mekong River Water Utilization – Hon Mun MPA Pilot Project, (VietNam)
Other regions (World Bank) Note: Non exhaustive	– Conservation and Sustainable Use of Mesoamerican Barrier Reef – Caribbean Archipelago Biosphere Reserve : regional marine protected area system project – Coastal Contamination Prevention and Marine Management Project – Strategic Action Programme for Red Sea and Gulf of Aden – Baltic Sea Regional Project

Linkages with other related initiatives in the region

The Mangroves for the Future (MFF) initiative is a multi-agency, multi-country initiative for the long-term conservation and sustainable management of coastal ecosystems such as mangroves, coral reefs, wetlands, forests, lagoons, estuaries, beaches and sandy shores. It covers ten tsunami affected countries in South and Southeast Asia and the Western Indian Ocean. Although currently in the inception phase, there are clear complementarities between the BOBLME Programme and the Mangroves for the Future initiative. FAO is a participating agency in this initiative with its Forestry group taking the lead, in coordination with the Fisheries group. Priority areas for collaboration between BOBLME and MFF are the habitat-fisheries linkages, but there are also shared interests regarding institutional governance and cooperation, knowledge-building and capacity development. MFF have specifically indicated interest to collaborate on the development of indicators for ecosystem health and the criteria and methods for the identification and development of Marine Protected Areas (MPA's). Other complementary activities will include coastal mapping and GIS applications associated with pilot project areas as well as integrated coastal management models. All of these link well with the MFF work which FAO is already involved in (Knowledge gap-analysis and institutional governance) and the broader goals of ecosystem management.

The International Coral Reef Initiative (ICRI) is a partnership among nations and organizations seeking to implement Chapter 17 of Agenda 21, and other international Conventions and agreements for the benefit of coral reefs and related ecosystems. The initiative was established in order to stop and reverse the global degradation of coral reefs and related ecosystems. The Coral Reef Degradation in the Indian Ocean (CORDIO) project of

ICRI was started in 1998 in response to the massive coral bleaching and mortality throughout the Indian Ocean. While the emphasis of CORDIO is still on monitoring, the focus of the programme is evolving towards projects related to management of over used coastal reefs and other critical coastal ecosystems. CORDIO is developing several activities concentrating on the protection of seriously threatened ecosystems by encouraging alternative fishing or other exploitation methods. These will have useful potential in lesson sharing and in areas of knowledge building.

Global Ocean Observing System in the Indian Ocean (IOGOOS) is attempting to coordinate the various elements of an observing system for the whole Indian Ocean, and to develop and implement pilot projects that may be basin scale or more regional in scope. Some of these projects will have sponsorship from UN agencies such as IOC, WMO, FAO, UNEP and others and by linking into GOOS they will benefit from the experience of other regional GOOS organizations and, also acquire access to the data and products available in the GOOS system. Similarly, the outputs generated from BOBLME will feed into the IOGOOS system.

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) has a sectoral working group on fisheries, with Thailand as the lead country. Priority areas identified for immediate action were “Ecosystem-based Fishery Management in the Bay of Bengal”, the “Study on Impact of Offshore Oil and Gas Drilling on the Marine Fisheries Resource in Bay of Bengal” and “Marine Fisheries Stock Assessment, Management and Development of New Fisheries in Bay of Bengal”. This working group has already initiated some preliminary cooperative activities in the area of fisheries assessment using the resources of the Department of Fisheries Thailand and the Southeast Asian Fisheries Development Centre (SEAFDEC). Having more coordinated management of the Bay of Bengal is perceived by BIMSTEC as an important institutional arrangement to enable more rational and sustainable exploitation and conservation of the deepwater fisheries of the Bay and to enable an ecosystem approach to fisheries management to be implemented.

4.3 Implementation and Institutional Arrangements (*Annex 6*)

The FAO's Fisheries Department, through the Regional Office for Asia and the Pacific (RAP) will serve as the Organization's Lead Technical Unit (LTU) to coordinate the implementation of the project. The Regional Operations Branch in RAP will be designated as the Budget Holder (BH). The LTU will maintain primary accountability for the timeliness and quality of technical services rendered for project execution. The BH will be responsible for administrative functions, and in this capacity will authorize the disbursement of funds. Together, they would be responsible, *inter alia*, for facilitating the coordination of project activities, including the identification and recruitment of international and national project staff, facilitate the establishment of the Project Steering Committee (PSC), developing sub-contracts with the participating countries and other partners, all in close consultation with the participating countries and once established, the PSC. A Regional Coordinator (RC) will be selected and each country will designate a National Coordinator (NC). The RC will facilitate the day-to-day implementation of the project in close consultation with the NCs and PSC members.

The World Bank will bring its extensive international experience and knowledge on coastal and marine issues and assist client countries to benefit from experiences and lessons of similar projects around the world. It will provide policy support and the sharing of "lessons-learned." In the implementation of the national, sub-regional and regional projects, the Bank, through its country offices will provide help seek assistance for specific investment opportunities at

country level that may evolve during the implementation of the BOBLME. Like FAO, the World Bank will serve as an ex-officio member of the Project Steering Committee and in National Task Force meetings in countries where there are WB representations.

Due to its multi-country scope, the BOBLME Project encompasses both regional and national components, and encompasses a wide range of technical fields, including fisheries and other living marine resources, critical habitats, pollution and socio-economic issues, all of which will require technically competent oversight. Furthermore, as a preparatory project focused upon building trust and cooperation between participating countries, setting priorities and identifying strategic management options for the BOB, the project requires a considerable emphasis to be placed on inter-country coordination, communications and information dissemination. As a result, the management structure presented below and in the accompanying organogram (Figure 1) fulfils both an administrative and coordination function and provides the basis for a range of other technical tasks not specific to individual activities. These include monitoring and information dissemination functions, as well as supervision of regional and national activities. The detailed implementation arrangements can be found in ***Annex 6*** along with Draft Terms of Reference (TORs) .

Project Steering Committee (PSC)

The PSC will be the policy setting body for the project and will also have the responsibility for endorsing the Annual Regional Work Plan (ARWP), the latter which will contain details of the previous years' technical activities and the proposed plan of work for the coming year. Composition would include two members nominated by each BOBLME member country; typically one would be drawn from the Ministry of Fisheries and the second from the Ministry of Environment. The Regional Coordinator would act as secretary. Chairmanship of the PSC would change annually (with no country repeating) and the country of the current chairperson will normally be the host country for the annual PSC meeting. The chairperson will retain contact with RCU during the year and agree upon the site and agenda for the next meeting. A senior official of the FAO and World Bank and bilateral donors would serve as members of the PSC in *ex-officio* capacity.

Once endorsed by the PSC, the ARWP will be submitted to FAO under signature of Chairperson of the PSC. The PSC will also consider and provide comments on external evaluations and audits. The PSC will normally meet once a year, although exceptional meetings (e.g. during the first year of start-up, if required) could be called.

Regional Coordination unit (RCU)

The RCU will act as secretariat to the PSC. It will coordinate work at the national level through the NCs and at the regional level through regional sub-contracting agencies or individuals.

Following approval of the BOBLME project in the February 2005 Intersessional Work Programme, the location of the project was reopened for consideration. In order to give the countries time to discuss the implications and potential host country commitments, a temporary arrangement was agreed by the BOBLME countries at the Appraisal Workshop that was held in Bangkok in June 2007. The FAO Regional Office for Asia and the Pacific (Bangkok) will host the RCU for one year in order to give the countries time to discuss the location of the RCU. The countries furthermore agreed that proposals would be prepared by countries interested in hosting the project and considered during PY1.

The RCU will be composed of two internationally recruited staff comprising a Regional Coordinator, a Chief Technical Advisor and a regional/national staff member with expertise in Monitoring and Information (M&I). In addition, three nationally recruited staff would provide office management, financial management and IT skills. Support staff (secretary, driver, cleaner) and additional services not requiring a full-time staff member (e.g. legal, IT systems maintenance, and specific technical skills areas) will be contracted as required.

The primary responsibility of the RCU will be to ensure the finalization of the framework Transboundary Diagnostic Analysis (TDA) and the Strategic Action Programme (SAP) as called for in the Project Brief. This would be achieved by preparing and coordinating the implementation of an ARWP that would draw upon Annual National Work Plans (ANWP) from each member state, as well as the programming of regional activities. The RCU will also develop and implement a monitoring programme, a communications programme and obtain independent scientific reviews of all significant technical matters (proposals or analyses). Reports on these activities, and financial results, would form part of the work plan submitted to the PSC and FAO.

National task forces and coordinators

The National Task Force (NTF) will guide the implementation of the project at the national level. Its role would be analogous to that of the PSC, but at the national level. Members of the NTF would be nominated by participating Ministries but will also include representatives from non-governmental, civil society and private sector organizations. The NTF will consider and endorse the ANWP prior to submission to the RCU, including specifications for work within the country over the next year, and support the timely undertaking of the work plan through activities of the National Coordinator, consultants and the National Scientific Advisory Panel (NSAP).

The National Coordinator will act as both Chairperson and Secretary to the NTF and will be responsible for preparing the agenda and documents required for NTF meetings as well as directly supervising implementation activities within the country. He/she would be nominated by the lead Ministry for that country with the approval of the Executing Agency and would be supported by a secretary. The FAO and World Bank will be represented on the NTFs by the country offices (where present), in *ex-officio* capacity.

Scientific advisory panels

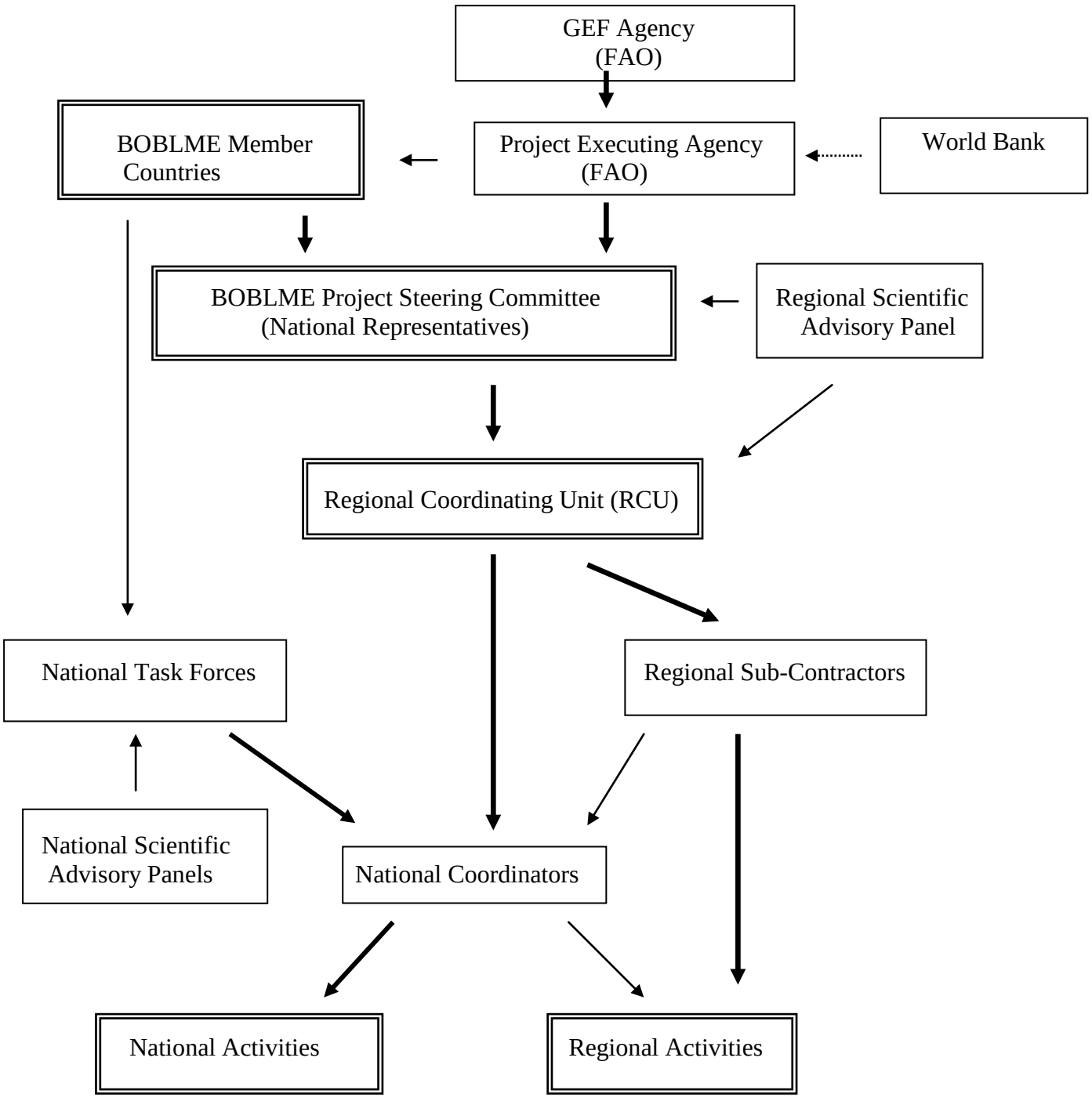
Scientific Advisory Panels are proposed at both regional and national levels. Each would consist of a roster of technical specialists, acknowledged as experts at their respective levels (regionally or nationally), who would be paid on an ‘as required’ basis but with CVs and rates previously approved under professional service procurement arrangements. The roster will comprise at least two specialists for each of the main areas of focus for the project (i.e. fisheries/living marine resources, pollution, critical habitats and socioeconomic/ livelihoods). Review of subject specific proposals/analyses will be by two or three related technical specialists. Review of technically broader documents will be by one specialist from each relevant field. Panel members would work independently, as under a peer review mechanism, and would not normally meet.

The Regional Scientific Advisory Panel will provide input to the policy guidance and work plan approval tasks of the Project Steering Committee (PSC), through the RCU. Their reviews would normally be attached to any technical document presented to the PSC.

National Scientific Advisory Panels would provide similar reviews of national technical proposals or documents.

The project's proposed management structure is presented below (Figure 1).

Figure 1. BOBLME Proposed Management Structure



4.4 Strategy and Methodology

GEF experience in supporting IW projects has demonstrated that the reversal of environmental degradation characteristic of transboundary marine ecosystems may take decades before the prerequisite institutional arrangements and commitments are established to lead to measurable improvements. As a result, the project, based on the results from the preparatory grants which supported strategic work that focused on fact finding, workshops, and institutional arrangements, was largely designed to create the foundation and enabling environment needed to support subsequent phases of the BOBLME Programme.

Specifically, the strategic approach adopted in project design was guided by four key principles adopted by the BOBLME countries at the onset of project preparation that have guided the development of the full-scale project. These were:

(i) Unanimous agreement that the BOBLME countries would work together, on a regional, ecosystem approach, rather than at a sub-regional level (South Asia, Southeast Asia) in developing the Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP);

(ii) A dynamic, action oriented approach would be adopted, and on the ground activities that address identified priority transboundary issues would be initiated during the implementation of the full-scale project, concomitant with the completion of the TDA and the development of the SAP. The activities to be undertaken would complement and directly feed into the TDA and SAP process. The BOBLME countries believed that this approach would ensure political buy-in of the wide range of institutions and stakeholders that would be involved in the process, as well as build momentum and commitment for early implementation of the SAP;

(iii) The SAP, the project's principal output, should initially focus on the management of living marine (fisheries) resources and the environmental threats to those resources. This approach in turn, could serve as a "stepping stone" to achieving eventual cooperation on a more comprehensive scale; and

(iv) The BOBLME initiative should be envisaged as a long-term, 10-15 year, programme consisting of two implementation phases. The first implementation phase project, as conceived in the draft Project Brief, would culminate in the development of a Strategic Action Programme (SAP) and agreed institutional collaborative arrangements that could be put in place by the end of the five year project.

A key input into project preparation were the findings, recommendations, and consensual agreements reached stemming from a process that supported the development of project's draft Framework TDA (FTDA). Using PDF-B funding, this process involved: (i) the establishment of a Project Steering Committee, (ii) the establishment of national task forces and national steering committees, (iii) a comprehensive literature review, (iv) preparation of national reports, (v) national consultations, (vi) regional thematic papers, (vii) international peer review and (viii) experts' meetings (see ***Annex 8***). This process provided the opportunity for country participants to break down complex transboundary situations into smaller, more

manageable components and activities; it was critical because the process served to identify the previously mentioned priority issues, barriers, and needed measures to address the issues and subsequently guided the development of the proposed project structure and activities.

In addition, a number of other “lessons learned” derived from recent and on-going GEF-supported LMEs and other relevant coastal/marine projects have been incorporated into project design. These include the need for:

Achieving a "shared vision."

Multi-country approaches developed to address issues, causal agents, and barriers to their resolution characteristic of large, complex geographic areas such as an LME must be bound together by a common understanding and "vision" both of the actual status and issues affecting the water body as well as where and how the participating countries would like to end up in collectively addressing these issues. Supporting activities that lead to a common view, agreed on end point, and "roadmap" outlining how to get there among participating countries is essential to avoid misunderstandings, inefficiencies, and ultimately delay and possibly failure in achieving a cost-efficient regional approach. This is particularly relevant to the BOBLME given the number of countries that border its waters. Particular attention has been given to this factor in project design in providing considerable time and support to develop this shared vision. Key activities include the process leading to the development of the SAP, institutional arrangements, as well as a number of regional and sub-regional activities designed to increase collaboration among countries addressing issues compatible with the BOBLME Programme framework.

Sustained political and public commitment.

As noted elsewhere, addressing issues at the scale of the LME is a long-term proposition, one that may take decades before improvements in the environment are capable of being measured. To sustain efforts over the period required to observe these improvements requires a substantial commitment in terms of time and long-term provision of financial and human resources. This commitment is needed both on the part of the countries as well as the participating development partners. Decision-makers and communities alike need to be kept aware and sensitized to the objectives and long-term commitments required to achieve this outcome. It is particularly important to avoid the risk of rising expectations for observable improvements in the near to medium term that cannot be met readily at the scale characteristic of the LME. It is only with broad public support that a long-term programme such as the BOBLME will be able to resist the pressures and possible adverse effects associated with transitory political processes and changing priorities. Project design has attempted to address this issue through the development of a wide and deep network of institutional arrangements, promotion of collaborative activities with other regional bodies, and public awareness and information dissemination activities.

An agreed on institutional and legal framework.

The need for well-recognized and cost-efficient institutional arrangements capable of both coordinating regional activities as well as bringing visibility to the effort is another fundamental lesson derived from LMEs elsewhere. Each participating country must feel that they are dealing with an "honest broker" that represents all their interests in the Programme equitably; real or perceived favouritism of one country could rapidly undermine any regional

approach and ultimately sound the death knell of an LME. Moreover, demonstrating agreement through consensus to the creation and support for regional institutional arrangements is also a significant indicator of national and regional political commitment to the LME process. The present project design, based on the solid foundation established in the preparatory phase, will lead to the definition and establishment of an agreed on permanent institutional structure through an open and transparent consensual process.

Partnerships.

Building broad partnerships among and within the BOBLME countries and with key regional/international agencies and donors are essential to achieve a coordinated implementation process and for utilizing the comparative advantage of the respective co-financing institutions. Outreach and collaboration with other regional programmes as well as the donor community has been explicitly included in project design.

Financial sustainability.

Regional projects often have high overhead costs given the inherent complexity of their tasks. Well-designed cost recovery mechanisms with strong enforcement can help to ensure financial sustainability. A financial sustainability subcomponent has been incorporated into the project that will be implemented in parallel and coordinated with the preparation of the SAP to ensure that cost recovery mechanisms will be developed as activities are identified for inclusion in the latter to ensure long-term sustainability.

4.5 Alternatives Considered and Reasons for Rejection

The evaluation of alternatives consisted of assessing options associated with two separate, but related issues: (i) the overall scope of and approach to the development of the SAP; and (ii) the institutional arrangements required for its preparation and eventual implementation. With respect to the former, the alternative that was considered was a process that would lead to a more comprehensive waterbody based programme that would concentrate on a wide range of transboundary problems (e.g., oil spill planning, legal and institutional reviews, pollution control measures, implementation of regional/global agreements and harmonization of legislation). In the BOB, this would entail achieving a high degree of regional cooperation with a large number of government agencies, many which would likely be directly involved in project implementation. In light of the size and complexity of the BOB and lessons learned from other GEF-supported LMEs, it was decided that a more focused approach, one based initially on the fishery sector, was the preferred option in the programme's first phase. This in turn, could be built on over time and expanded gradually to encompass other sectors as opportunities for collaboration were identified. This approach had the added advantage of building on existing contacts amongst fisheries institutions and the collaboration engendered through the earlier BOBP.

With respect to possible institutional arrangements three alternatives were considered: (i) establishing a new regional body; (ii) setting up a project management unit in an existing regional institution or body; and (iii) distributing project management tasks among several existing regional, sub-regional and/or national institutions. The first option was disregarded primarily due to the general view that there were already too many bodies in the region with narrow, specific mandates with the associated risk of overlap and duplication. There was also the added concern regarding the long process and accompanying expense associated with the establishment of a new regional body. Nevertheless, if this option proves to be in the long-

term interest of the goals and objectives of the BOBLME, it could be considered in the programmes second phase dependent on the findings of the institutional assessment supported under subcomponent 1.2.

The second option was rejected primarily due to the absence of an existing institution with the relevant combination of thematic mandate and geographical scope compatible with the proposed BOBLME Programme (see ***Annex 1***). While a project management office could be established in one of the existing regional institutions, in the absence of a compatible mandate and geographic scope, long-term institutionalization would likely be put in doubt. During project preparation it was the general view that the preferred approach would be to work collaboratively with existing relevant institutions.

The third option was rejected due to the large number of countries (and much greater number of possible candidate institutions involved) and the recognition that the major focus during the initial phase of the BOBLME project should be placed on building the needed common vision, process, and SAP. All institutional alternatives will be re-examined during the institutional analysis which is supported under the project.

5. FINANCING PLAN AND PROVISIONAL WORK PROGRAMME (*ANNEX 5*)

5.1 Financial Planning

The project will be partially financed by a full-size GEF grant in the amount of US$12.1 million, with co-financing from (1) BOBLME Governments (in cash and in kind); (ii) Co-financiers (cash and in kind); and FAO (in kind). The Financing Plan, including the details inputs budget in the FAO Oracle format, can be found in ***Annex 5*** along with the Provisional Work Programme.

Project Cost by Component/Subcomponent

Component	Total (US $ '000)	% Total Base Costs
1. Strategic Action Programme (SAP)		
1. Finalization of TDA/ TDA Preparation	1,228.2	4
2. BOBLME Institutional Arrangements	1,750.2	6
3. Sustainable Financing Study/ Financial Strategy	1,114.2	4
4. SAP Formulation and Adoption	1,348.8	4
Subtotal: Strategic Action Programme (SAP)	5,441.5	18
2. Coastal/Marine Natural Resources Management and Sustainable Use		
1. Community-based Integrated Coastal Management ICM)	1,036.6	3
2. Improved Policy Harmonization	2,812.6	9
3. Collaborative Regional Fishery Assessments and Management Plans	10,051.1	32
4. Collaborative Critical Habitat Management	561.3	2
Subtotal: Coastal/Marine Natural Resources Management and Sustainable Use	14,461.5	47
3. Improved Understanding and Predictability of the BOBLME Environment		
1. Large-scale Processes and Dynamics	653.6	2
2. Marine Protected Areas and fish refugia	3073.7	10
3. Regional Collaboration	702.0	2
4. Improved understanding and predictability of BOBLME: GIS	2,194.8	7
Subtotal: Improved Understanding and Predictability of the BOBLME Environment	6,624.1	21
4. Maintenance of Ecosystem Health and Management of Pollution		
1. Environmental Indicators	570.3	2
2. Coastal Pollution Loading and Water Quality Criteria	769.5	2
Subtotal: Maintenance of Ecosystem Health and Management of Pollution	1,339.8	4
5. Project Management, Monitoring and Evaluation and Knowledge Management		
1. Establishment of the RCU	2,490.6	8
2. Monitoring and Evaluation System	431.0	1
3. Project Information Dissemination System	205.1	1
Subtotal: Project Management, Monitoring and Evaluation and Knowledge Management	3,126.7	10
Total BASELINE COSTS	**27,**741.0	100.0
Physical Contingencies	1,604.8	6
Price Contingencies	1,856.2	7
Total PROJECT COSTS	30,993.5	113

5.2 GEF Input

The GEF's added value is to provide incentives and financial support for national and local institutions to address priority transboundary environmental problems in the BOBLME. The project's regional approach, with GEF support, will make financial resources available to recipient countries, to meet the incremental costs required to address transboundary issues. GEF funds will assist in providing essential linkages and in harmonizing national and local actions with regional environmental objectives. The GEF contribution that is requested is US$12,082,100.

5.3 BOBLME Government Inputs

The long-term success of the BOBLME Programme will ultimately depend on the shared vision, approach and commitment of the BOB countries to the programme's existence. Participating countries can mobilize the global community to participate through strategic

partnerships, primarily in the form of provision of support for activities which in turn will lead to the creation of the necessary enabling environment to achieve the aforementioned commitment over the long-term. National governments have demonstrated their substantial commitment to the first phase project, through provision of significant levels of support in both cash and in-kind contributions. Confirmed sources of direct cash finance are US$2 200 000). Confirmed sources of direct in-kind finance are US$3 500 000. Cash contributions will be equivalent for all countries and be used to cover the costs of: (i) a contracted full-time national technical advisor, (ii) the *pro rata* portion of the salary of the national coordinator, (iii) associated office space and utilities, and (iv) in-country costs associated with sponsoring project-related national workshops and the participation of national representatives. In addition, BOBLME governments will provide substantial in-kind contributions which will cover: (i) all counterpart salaries for workshops and training and local travel and (ii) the time of National Task Force members. Finally, once a host country is selected, it is expected that substantial support would be provided for the Regional Coordination Unit (RCU). Likely support would include provision of appropriate office space, related office operational costs and utilities including telecommunications, and the contracting of three support staff (secretary, driver, and cleaner).

5.4 Donor Inputs/ Co-financiers

Co-financing agencies are an essential partner to the BOBLME Programme. GEF resources are only catalytic in nature and additional sources of financing and expertise are essential to achieving the identified project objectives and programme goal over the longer term. This is particularly relevant in an area as large and complex as the BOB.

TABLE 4: SOURCES OF CONFIRMED **CO-FINANCING**

Name of co-financier (source)	***Classification***	***Type***	***Amount ($)***	***%****
Norway	Donor Government	Grant	1,200,000	6.4
Sida	Donor Government	Grant	1,288,900	6.8
Sida	Donor Government	Other	9,522,500	50.4
NOAA	Donor Agency	In kind	400,000	2.1
BOBLME Governments	Recipients	Cash	2,200,000	11.6
BOBLME Governments	Recipients	In kind	3,500,000	18.5
FAO	GEF Agency/Executing Agency	In kind	800,000	4.2
Total Co-financing			18,911,400	100%

* Percentage of each co-financier's contribution at CEO endorsement to total co-financing

5.5 Technical Support

FAO

FAO will bring its wealth of experience and technical expertise in sustainable fisheries management and in the marine and coastal environment, particularly with respect to the Bay of Bengal region, to support all aspects of project implementation.

World Bank

The WB will bring its extensive international experience and knowledge on coastal and marine issues and assist client countries to benefit from experiences and lessons of similar projects around the world. It will provide policy support and the sharing of "lessons-learned." In the implementation of the national, sub-regional and regional projects, the Bank, through its country offices will provide assistance for specific investment opportunities at country level that may evolve during the implementation of the BOBLME.

6. OVERSIGHT, MONITORING, MANAGEMENT INFORMATION AND REPORTING

6.1 Oversight and Reviews

The Project Steering Committee (PSC) will be responsible for providing general oversight of the execution of the Bay of Bengal Large Marine Ecosystems Project and will ensure that all inputs and processes required for the development of the Transboundary Diagnostic Analysis (TDA), the Strategic Action Programme (SAP) and any additional activities agreed upon under the GEF project document are adequately prepared and carried out. In particular, it will:

- Provide overall guidance to the Regional Coordination Unit in the execution of the project.
- Ensure all project outputs are in accordance with the BOBLME Project Document.
- Review, amend if appropriate, and approve the draft Annual Regional Work Plan of the project for submission to GEF and FAO.
- Facilitate the “mainstreaming” of relevant project findings and recommendations into national policy.

The PSC shall comprise two high level national representatives nominated by each participating member country. Normally one national representative will be nominated from the Ministry of Fisheries or other national agency responsible for living marine resources, while the second representative will be from the Ministry of Environment or other national agency responsible for coastal and marine environmental issues. A senior FAO official shall be represented on the PSC, in *ex-officio* capacity.

Project Steering Committee meetings will normally be held annually, but the Chairperson will have the discretion to call an additional meeting, if this is considered necessary (e.g. during the first year of execution, or for significant modifications to the approved Annual Regional Work Plan[7]). No more than 13 months may elapse between PSC meetings.

The first PSC meeting will be chaired by the Regional Coordinator. At the termination of this meeting, the PSC will select a Chairperson from among the national representatives on the PSC by a simple vote. The Chairperson will serve for one year, finishing his/her term upon the completion of the PSC meeting held closest to one year after selection. At this point a successor Chairperson shall be chosen by the PSC voting members in a similar manner. In liaison with the PSC Secretariat, the Chairperson shall be responsible for determining the date, site and agenda of the PSC meeting(s) during his/her period of tenure, as well as the

[7] Interim sessions of the PSC would not necessarily require a physical meeting, and could be undertaken by e-mail or other electronic format.

chairing of such meetings. He/she will ensure circulation by the Secretariat to PSC members of all relevant documents, and will sign approved Annual Regional Work Plans and any subsequent proposed amendments submitted to FAO.

6.2 Project Reporting, Monitoring and Evaluation *(Annexes 3 and 9)*

Monitoring of project progress and outcomes will be a central function of the RCU and will be the responsibility of one of the three internationally recruited RCU staff (who will also be responsible for IT issues). He/she would be supported at the regional level by a database/IT clerk and at the country level by the National Coordinators. Resources are provided in the project budget for the finalization of a monitoring system upon project start-up.

Indicators for monitoring purposes would be drawn from the project's Results Framework (***Annex 3***), adjusted where necessary and justified. Specific monitoring tasks will be defined in the context of technical and disbursement plans contained in the ARWP, broken down by quarter. Each ARWP will contain a monitoring programme for the proposed activities, indicating which activities will require field interventions to gather data, and whether the task would be undertaken by the RCU staff member, the relevant National Coordinator or, in some cases, outside consultants.

The ARWP is the central tool for guiding the work of the project and ensuring compliance of project activities with the overall Project Brief. It will be prepared by the RCU and submitted to the PSC for their endorsement within 45 days of the commencement of each calendar year and will be derived from ANWP proposals submitted by each country as well as projected regional activities. ARWPs will provide a review of the previous year's activities (national and regional) and proposed plans for coming year. They will include a discussion of technical activities, a provisional financial report (including expenditure projections and disbursement plans), and reports on communications/dissemination, monitoring and IT.

Monitoring information may also be obtained from the independent scientific reviews conducted by members of either the Regional or National Scientific Advisory Panels (RSAP and NSAP), although this would largely be limited to assessment of research quality.

Each ARWP would contain a monitoring report, detailing the results of the previous year's monitoring activities.

Project progress will be monitored largely through the recording and verification of inputs, including financial disbursements and technical levels-of-effort. Financial inputs (disbursements) would be largely drawn from FAO (the Executing Agency) financial management system, while technical inputs would be drawn from reports from National Coordinators and regional sub-contractors. The monitoring system would specifically compare financial disbursements to technical activities programmed in the ARWP and identify and assess any significant discrepancies between the two.

The monitoring of activity outcomes will constitute the second major output of the monitoring system. In some cases outcomes will be identifiable through evidence of training sessions, workshops or other activities. In others, the independent scientific review panels will provide confirmation of satisfactory results from studies etc. In some instances, it is anticipated there will be a need for physical inspection and/or surveying of activity sites and participants in order to confirm appropriate outcomes and assess their congruence with ARWP objectives. This latter task would often be undertaken by the relevant National Coordinator, or the

Monitoring and Information Specialist (the latter particularly for regional activities), but may sometimes require the use of external consultants, and provision is made in the budget for their recruitment.

The project will not directly attempt to evaluate project impact, as this is more appropriately undertaken by external assessors during project **mid-term and final evaluations**. However, the availability of baseline data may be critical for subsequent impact evaluation, and in the annual monitoring work programme the RCU will nominate those activities believed to be of particular significance and for which, as a result, baseline assessment is considered cost-effective. The collection of baseline data would normally be contracted to an independent consultant not involved in project execution, working under the guidance of the NC and the Monitoring and Information Specialist.

Ex-post data gathering may also occur where this is specifically requested by the Executing or Implementing Agencies or, more commonly, by the project mid-term or final evaluation mission prior to their arrival or during their mission.

IT systems for the project will be the responsibility of the Monitoring and Information Specialist with one nationally-recruited assistant. An office intranet will be established with a server to provide for common files and periodic tape back-up for the estimated eight users. Where feasible, National Coordinators will be enabled to upload and download data and other files through a web-based system. The printer and scanner will also be networked. IT systems maintenance (including ensuring updated security patches and data back-up) will be handled by a locally contracted IT company. The project website will be designed externally at the commencement of the project but will be maintained and updated by internal staff.

There will be close collaboration between the Monitoring and Information Specialist and the Financial Controller to ensure the provision of management information and timely preparation of quarterly reports.

The detailed Project Reporting, Monitoring and Evaluation plan can be found in ***Annex 9.***

Table 5: Monitoring and Evaluation Plan and Budget

Type of M&E activity	Responsible Parties	Budget US$ Excluding project team Staff time	Time frame
Inception Workshop	Regional Coordinator FAO (LTU, BH, TCI GEF Unit) FAO country office	60,000	Within first two months of project start up
Inception Report	Regional Coordinator FAO	None (there is always a cost, but it may not be an additional cost)	Immediately following Inception Workshop
Revision of environmental baseline post-tsunami	Regional Coordinator, in consultation with FAO LTU and BH, will oversee the hiring of specific studies and institutions,	500,000 (includes development of indicators under component D.1)	To be finalized and agreed by end of Project Year 1 and updated throughout project, as necessary
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis) + workshop for dissemination	Oversight by Regional Coordinator and CTA, responsibility of Project M&E staff and National Coordinator, with assistance from FAO LTU and other technical divisions; Measurements by regional field officers and national/local executing agencies. Regional	125,000 To be determined as part of the Annual Work Plan's preparation.	Annually prior to APR/PIR and to the definition of annual work plans

	Coordinator, in consultation with FAO to provide general framework. National Coordinators will organize national workshops and assign/contract institutions/other team members to assess project impact.		
Project Progress Reports, Annual Project Implementation Review (PIR)	Project Team FAO FAO GEF Unit Project Steering Committee National Coordinators	None	Semi-Annually (PPR) Annually (PIR)
TPR and TPR report	Government Counterparts Project team FAO LTU, BH and GEF Unit, LTU, BH Project Steering Committee National Coordinators	None	Every year, upon receipt of PIR
Project Steering Committee Meetings	Project Steering Committee members; Regional Coordinator, National Coordinators; FAO, participating countries, FAO and World Bank country offices (if in one of the participating countries)	90,000	Following Project Inception Workshop and subsequently at least once a year. To be linked with major regional workshops/events
Technical reports	Project team FAO (LTU, BH, Project Task Force) Hired consultants as needed	50,000	To be determined by Project Team, PSC, FAO
Independent Mid-term External Evaluation	FAO – PBEE (Evaluation Service) Project team Participating countries FAO (LTU, BH, GEF Unit, TCOM) FAO country offices Independent external consultants (i.e. evaluation team)	50,000	At the mid-point of project implementation.
Final External Evaluation	FAO – PBEE (Evaluation Service) Project team Participating countries FAO (LTU, BH, GEF Unit, TCOM) FAO country offices Independent external consultants (i.e. evaluation team)	90,000	At the end of project implementation
Terminal Report	Project team FAO	10,000	At least one month before the end of the project
Lessons learned	Project team FAO (particularly the LTU) FAO GEF Unit	15,000 (average 3,000 per year) or 75,000 over the life of the project	Yearly
Visits to field sites	FAO (LTU, BH, country office) Government representatives Project staff	An integral part of project activities, not a separate cost	As required
TOTAL indicative COST ***Excluding project team staff time and FAO staff and travel expenses***		**1,050,000**	

6.3 Communication and Visibility

During the BOBLME Project preparation phase a number of the member governments emphasized their view that particular attention should be given to improved dissemination of knowledge concerning the BOBLME and the activities of the project itself. As a result, the dissemination of general information as well as project activities and results is considered to be an important element of the project.

This task will be the second major responsibility of the Monitoring and Information Specialist and a communications programme will be appended to the ARWP, as well as a report summarizing communications activities over the past year. The specialist will be supported by an assistant trained in desktop publishing/website maintenance. Three specific target audiences are envisaged: (i) national governments (in all BOBLME member countries), (ii). the regional and international scientific community, and (iii) the general public. Specific strategies and products will be developed to ensure that all three groups are reached.

Communications and dissemination tools will include a dedicated BOBLME website, press releases, and promotional materials (e.g. brochures, posters). Periodic bulletins will be circulated to all NTF member institutions, research organizations, and relevant NGOs. During the course of the project a number of major communications efforts (e.g., the preparation of videos and similar materials for use on television and in schools), will be prepared using external specialists. Resources are provided in the project budget for the design and start-up of the website which will contain reports, news and public relations material, as well as for publishing costs for bulletins etc.

7. PROJECT APPRAISAL

7.1 Social

The eight countries bordering the BOBLME include some of the most populous on earth, with India, Indonesia and Bangladesh being among the world's top ten. Collectively the BOBLME countries are home to some 1.55 billion people, or a little less than a quarter of the world's population. Approximately 400 million people live in the BOBLME's catchment area, and many are among the world's poorest, subsisting at or below the poverty level. Many of these poor are part of the burgeoning coastal population and they depend primarily or entirely on coastal and marine resources, in particular the fisheries and in associated critical habitats; they have few if any alternatives to these resources for their food, shelter and livelihood. The coastal capture fisheries from the BOBLME alone provide direct employment to two million fishermen. Given existing population growth estimates, it is expected that the population in the region will exceed 1.8 billion by the year 2015 and account for almost 26 percent of the world's population. Obviously this has implications for the BOBLME's coastal and marine resources and the livelihoods of the communities that depend on said resources.

The BOBLME project is not a 'health project' but should also not miss the opportunity to disseminate quality information on HIV avoidance and treatment, through its close interaction with fisher communities. Epidemiological studies on HIV/AIDS by occupation show that seafarers are among the group most prone to infection, probably due to some of the peculiarities of their jobs. Unsafe sex and unsafe seafaring have much in common - such as drug addiction, alcohol abuse, long periods away from home and visits to commercial sex

workers. Various studies have cited HIV prevalence levels among fishermen in Asia from seven percent to as high as 15 percent. It could be argued that the limited mobility of small scale fishermen in many countries does not expose them to the same levels of temptation and risk as offshore fishers who travel further and are away from home for longer, this view is too simplistic. Many small scale fishers in the region consist of migrants of varying duration, these, generally young men would be classified as a high risk group. These groups may be considered high risk and on the periphery of national HIV information networks, proactive linkages with health agencies will be sought as part of community management approaches and broader information dissemination activities of the programme.

As women in developing countries are mainly subsistence producers and users of environmental resources, it is critical to recognize and integrate women's knowledge in the conservation and management of these resources to ensure their sustainability. Whilst it is true that the vast majority of fishers in each country are male, this fact should not be used as an excuse to overlook the reliance of women on the fishery and the difficulties that they face. Coastal fishing is a predominantly male occupation, however foraging and other coastal resources related activities including post harvest preparation, trading and savings are frequently the domain of women. The important role that women can play in conflict resolution is also noted as women are less prone to resorting to violence to resolve problems. Attempts to empower women through women's only groups may fail but approaches to integration of gender issues into decision making can positively impact decision making in resource management as well as improving livelihood opportunities and the potential for exploring improved fisheries products, financial mechanisms such as savings and micro credit facilities. Background studies will look into women's issues and will be used to advocate for positive discriminatory strategies or approaches.

Given the magnitude and complexity of the issues involved, the project does not pretend to directly address the socio-economic issues of the poor fishers in the BOBLME in any significant way. Rather, consistent with the World Bank's poverty reduction efforts, the project attempts to address many of these issues through supporting foundational/capacity building processes for multi-country collaboration in this phase of the BOBLME Programme justified on the need to overcome many of the previously identified constraints barring the taking of collective actions by the BOB countries. As stated previously, once the needed institutional arrangements and conditions are put in place, then GEF, the World Bank, and other development partners can play a more direct and effective role in assisting the small fisher community where actions requiring a regional approach are most cost-effective. It is expected that a small number of fisher communities are likely to benefit directly from activities supported under the project. These include: the "mainstreaming" of sound community-based ICM policies (subcomponent 2.2), and the development of collaborative approaches to fishery management (subcomponent 2.3) and critical habitat management (subcomponent 2.4) and broader impacts of advocacy on health and gender issues.

7.2 Stakeholder Consultation (*Annex 7*)

The major stakeholders relevant to project objectives can be classified in three groups, regional, national and local stakeholders. Regional stakeholders include multi-lateral/bi-lateral development agencies and programmes, regional development banks, and international NGOs. National stakeholders include national and state government agencies, civil society organizations, NGOs, private foundations, private sector organizations, and academic institutions. Local/beneficiary stakeholders comprise local government agencies; commercial and rural fishers and their families; school teachers, students and rural youth; coastal/marine

tour operators and their clients; local environmental and social/cultural NGOs; and other local citizens.

During project preparation the involvement of these stakeholders occurred through participation in: (i) national consultations and workshops, (ii) meetings of the national task forces, (iii) the development of national reports, (iv) regional workshops and technical meetings, and (v) meetings of the Project Steering Committee. A record of the aforementioned events can be found in ***Annex 8.*** Selected documentation in support of the BOBLME Project preparation process has been posted on the website (http://www.fao.org/fi/boblme/website/index.htm).

During project implementation, stakeholder participation is included in all project components at varying levels of intervention. At the community level, local participation is specifically identified and costed as key inputs into the: (i) "stocktaking" activities (subcomponent 2.1); (ii) local capacity improvements as part of policy "mainstreaming" (subcomponent 2.2); (iii) development of all project-supported fishery management and critical habitat plans (subcomponents 2.3 and 2.4, respectively); and (iv) case studies and development of guidelines associated with assessing the role of fish refugia in the management of fish stocks in the BOBLME (subcomponent 3.1). Consultations at the national level will be ensured through the creation of project-wide National Coordinators and Project Task Forces. Additionally, specific national consultations have been included and costed as workshops (subcomponent 2.1), national fishery task forces (component 2.3), and commissions (2.4). National consultations are the "heart" of the processes leading to the finalization of BOBLME institutional arrangements (1.1) and the development of an agreed on SAP. Finally, at the regional level there are a large number of workshops and consultations which will be supported across many of the components as well as the project-wide regional collaboration supported under the improved BOBLME "predictability" subcomponent (3.3) and information dissemination subcomponent (5.3).

A stakeholder participation plan has been prepared (see ***Annex 7***).

7.3 Environment

Most of the activities that will be supported in the first phase project are designed to put in place the foundation and institutional arrangements, processes and capacity to support a regional collaborative effort to address critical issues, underlying causal agents and barriers which are contributing to a decline in environmental health of the BOB. Moreover, in those subcomponents where there are field interventions (primarily in the development of collaborative approaches to fishery management, critical habitats, marine protected areas and fish refugia, water quality monitoring and data sharing leading to an improved understanding of the BOB status and processes), all will contribute to positive environmental impact either over the medium-term (i.e., the life of the project) or contribute to information and processes which will have a significant positive impact in the BOBLME Programme's subsequent phases.

ANNEXES

TABLE OF CONTENTS

ANNEX 1: COUNTRY AND SECTOR OR PROGRAMME BACKGROUND

For the purposes of the Bay of Bengal Large Marine Ecosystem (BOBLME) Programme, the Bay of Bengal (BOB) region has been defined as comprising the coastal watersheds, islands, reefs, continental shelves and coastal and marine waters of the Maldives, Sri Lanka, the east coast of India, Bangladesh, Myanmar, the west coast of Thailand, the west coast of Peninsular Malaysia, and the Indonesian provinces of Aceh, Riau, and North and West Sumatra (see Annex 14). This body of water, measuring approximately 3.3 million km^2 in area, together with the coastal drainage systems, has been identified as one of the world's sixty-four Large Marine Ecosystems (LMEs) sharing a distinct bathymetry, hydrography, productivity, and tropically dependent populations.[8]

About one-quarter of the world's population reside in the littoral countries of the BOB of which some 400 million live in the Bay's catchment area alone, many subsisting at or below the poverty level.[9] An average of 65 percent of the region's urban population live in large coastal cities and migration towards the coastal regions appears to be on the increase.[10]

The BOB supports numerous coastal fisheries, many of which are of significant socio-economic importance to the countries bordering the water body; an estimated two million fishers who operate primarily in coastal and inshore waters are directly employed in the sector.[11] Included amongst these fisheries are coastal demersal, shrimp and small pelagic fisheries, as well as offshore fisheries for tuna and similar species.[12]

The distribution of many of the BOBLME's fish stocks extend across the shared national boundaries of adjacent countries and in some cases into waters well beyond the BOB. Large pelagic species such as tuna and billfish range over vast ocean space and pass through the exclusive economic zones (EEZs) of many of the countries in the region. Some smaller pelagics often migrate through the coastal waters of two or more neighbouring countries while other species are distributed throughout the coastal areas of all the BOB countries.

The key issue facing the region’s coastal fishing communities is the unsustainable harvesting of certain species, a result of the open access nature of the resource (Attachment 1). Many of the fishery resources in the region are already heavily exploited and if fishing is allowed to continue unregulated the situation will likely worsen with significant adverse impacts on the large number of small-scale fishers dependent on these resources for their livelihoods and as a source of food security.[13] The socio-economic implications of non-sustainable exploitation

[8] Sherman, K., 1994. Sustainability, biomass yields and health of coastal ecosystems: an ecological perspective. Mar. Ecol. Progr. Ser., 112: 277-301.

[9] The BOBLME countries are ranked by the UN Human Development Index (HDI) as all having reached the Medium Human Development level. Nevertheless in aggregate, these countries are also home to the world's largest concentration of income poor.

[10] World Resources Institute, 1990. World Resources: a guide to the global environment. World Resources Institute. Oxford University Press, Oxford.

[11] Preston, G.L., 2004. Review of the status of shared/common marine living resource stocks and of stock assessment capability in the BOBLME Region. Report prepared for the Sustainable Management of the Bay of Bengal Large Marine Ecosystem Program (GCP/RAS/179/WBG). FAO, Rome.

[12] Tuna are commonly sought in the vicinities of Sri Lanka, the Andaman Islands (India), Indonesia and Thailand.

[13] For example, the recent catch per trip of tuna in the Maldives and Sri Lanka has declined to about one-half of the 1980s level. Elsewhere, resource surveys in the coastal areas of Malaysia indicate that trawl harvests in the 1980s were already one-third of the 1970s level while on the Andaman Sea coast of Thailand they appear to be about one-half from previous levels over this same period of time.

of fish stocks is exacerbated further by the illegal incursion of foreign fleets, increased competition and conflicts between artisanal and large-scale fisherman, encroachment by nationals into the territorial waters of neighbouring countries, and an alarming increase in cyanide fishing and other non-sustainable fishing practices.

A second key issue is the continued degradation of highly productive coastal and near-shore marine habitats such as coral reefs, mangroves and estuaries, and marine grass beds, all critical fish spawning and nursery areas. Immediate causes include land conversion and reclamation, direct overexploitation, accelerated sedimentation, and destructive tourism and fishing practices. Sea-based sources of pollution include oil pollution and offshore oil and gas exploration. There are also the possible adverse impacts related to the future development of seabed minerals.

Finally and closely related to the two issues described above, are the accumulative effects associated with land-based sources of pollution that are contributing to the disruption of basic processes and functioning of the marine ecosystem. These include degradation and loss of fish spawning and nursery areas, fish kills and possible changes in trophic structure.[14] The fate and effect of pollutants have not been studied extensively but there is a growing body of evidence to support the conclusion that most are deposited as estuarine sediments, while a smaller portion is flushed out to deeper waters. While it is argued by some that the ecosystem's assimilative capacity on the whole has not been exceeded and that pollution problems are localised in nature, there remain many uncertainties about the Bay's status and ecological functioning, much of it attributable to the lack of comprehensive, reliable data.

Major root causes underlying these issues include: (i) population growth and changing demographics; (ii) continued demand for increased foreign exchange met, at least in part, by exports based on the primary sector; (iii) a growing and diversifying industrial sector; and (iv) the undervaluing of the natural resources and the environmental "goods and services" provided by the coastal and near-shore marine ecosystems.

One major barrier to resolving these issues is the absence of a regional mechanism that would facilitate multi-national collaborative efforts to address these issues. A second major barrier consists of the weak and/or inappropriate policies, strategies and legal measures that characterize much of the region. Where these do exist, they are rarely enforced. Other major constraints include lack of alternative livelihoods, weak institutional capacity, insufficient budgetary commitments, and lack of community stakeholder consultation and empowerment.

The BOBLME countries are well aware of these issues, causal factors and barriers to their resolution and in response have demonstrated significant levels of commitment to address many of them. The 1992 United Nations Conference on the Environment and Development (UNCED) produced five instruments including a blueprint for action to be applied globally from the early 1990s into the 21st Century – Agenda 21.[15] The principles of Agenda 21 have subsequently influenced changes in other instruments of regional and international

[14] For example, in some regions of the Bay, for example, a change in composition of plankton species has already been noted. See E. S. Holmgren, E.S., 1994, The Impact of the Environmental on the Fisheries of the Bay of Bengal Swedish Centre for Coastal Development and Management of Aquatic Resources. SWEDMAR/BOBP. (Madras 1994).

[15] The others were the Rio Declaration, a Statement of Principles on Forests, and two international Conventions on Biodiversity and Climate Change.

environmental law. Of these instruments, the eight BOBLME countries have demonstrated a high degree of participation (Attachment 2).

Despite these commitments, it is clear a number of the previously identified issues need to be addressed through a more focused, regionally coordinated effort. These include: (i) common property management issues (for example, relating to migratory species and shared stocks); (ii) fishing rights and access within the Bay of Bengal global commons; (iii) transboundary issues associated with pollution; and (iv) the management of ecosystems whose boundaries extend beyond one or more national political jurisdictions. Moreover, there are many benefits to be gained from addressing the problems described above through action coordinated at the regional level. For example, issues of a transboundary nature in which actions taken by one country may have an adverse impact on another are best tackled through a concerted, harmonized collaborative approach. The countries of the BOB also face a commonality of problems from which they would benefit through sharing experiences and expertise and developing or enhancing regional and/or local solutions. Finally, there are the economies of scale and cost advantages which accrue from addressing certain problems in a collaborative fashion.

There already exist a number of international, regional and sub-regional institutions and programmes operating in the Bay (see Attachment 3). Despite their large number, none appear to have the mandate, geographical scope and/or capacity to support an initiative based on an LME approach; particularly one that addresses the shared and common issues and barriers characteristic of the Bay of Bengal.[16] However, it is equally clear that the BOBLME Programme cannot resolve these issues acting in isolation. Rather, it must build on past experience and present institutions and activities in the region, including data and information collected through the numerous national and regional initiatives addressing the coastal and marine environment and fisheries issues in the Bay of Bengal to achieve any significant lasting impact.

The Global Environment Facility (GEF) is in a unique position to build on and strengthen existing programmes and partnerships in the region through supporting the development of a transboundary perspective and approach. It has already demonstrated its commitment to such an initiative through supporting a number of preparatory activities through provision of Block B and Supplemental Block B grants (see Annex 4).[17] These grants, supplemented by additional co-financing, have been used to: (i) put in place national and regional coordinating mechanisms to ensure broad-based stakeholder participation in the preparation of the project; (b) prepare baseline reports; (c) prepare a framework Transboundary Diagnostic Analysis (TDA); and (d) formulate the project document for GEF and other donor financing. Building on this solid foundation, it will now require a concerted, focused, regional effort, one based on a long-term institutional and financial commitment from the BOBLME countries, working in close partnership with other existing institutions and programmes, to achieve any discernible improvement in the ecological health in an ecosystem the size and complexity of the Bay of Bengal.

[16] Twelve of these institutions were evaluated during project preparation. None were found to be suitable to support a programme with the characteristics of the BOBLME due to failing to meet one or more of the following criteria: (i) their mandate was too broad, (ii) their mandate was too narrow, and/or (iii) they did not cover the region corresponding to the BOBLME. See Lugten, G. 2004. Study on options for regional coordination mechanisms. Report prepared for the Sustainable Management of the Bay of Bengal Large Marine Ecosystem Programme (GCP/RAS/179/WBG). FAO, Rome.

[17] Additional funding was provided by Sida.

Attachment 1. Major Threats Root Causes and Constraints in the BOBLME [1/]

Priority Transboundary Environmental Issues	Priority Threats	Immediate Causes	Root Causes	Major Information Gaps	Constraints
Overexploitation of living marine resources	• over-fishing • destructive fishing • pollution • coastal and upstream development	• increasing fishing pressure (e.g., due to growth in commercial fishing, non-sustainable fishing practices, coral mining, etc.) • accumulation of pollution wastes • conversion of coastal lands • siltation and sedimentation • salinization (water diversion)	• population growth • national demand for foreign-exchange • urban growth and poorly planned coastal development • growth and diversification of industrial activities • need to increase agricultural and aquacultural productivity	• fragmentary/unreliable fishery statistics • inadequate fishery-independent data • inconsistent and incomplete taxonomic identifications • existence and relevance of traditional ownership and customary use systems	• lack of alternative livelihoods • under valuing of relevant environmental goods and services • inadequacy in relevant legislation (overlapping and/or conflicting legislation) • inadequacy of existing implementation authority (sectoral approach) • lack of sufficient budgetary commitments • lack of institutional capacity • inadequate enforcement of existing legislation • lack of community stakeholder consultation
Degradation of critical habitats - mangroves - coral reefs - grass beds	• conversion and reclamation • direct overexploitation • pollution • siltation and sedimentation • salinization • destructive fishing practices (corals/grassbeds only) • destructive tourist practices (corals only) • sand/coral mining coral/sand mining	• poorly planned aquaculture, agriculture, salt ponds, urban development • sewage, domestic, industrial, and agricultural/aquacultural wastes • dredging • dynamite fishing, cyanide poisoning, etc. • beach replenishment		• existence and relevance of traditional ownership and customary use systems • valuation of “goods and services” provided by critical habitats • areal extent and environmental status of seagrass beds	
Land based sources of pollution	• sewage and other domestic and municipal wastes • agricultural and aquacultural wastes • industrial wastes	• harmful practices leading to the generation and transport of wastes to the coastal and marine environment		• identification and prioritization of pollution "hot spots" and relative importance • fate and affect of pollutants • permissible pollution discharge limits • appropriate and affordable clean production technology and best practices role and economic value of natural pollution attenuation services	

[1/] Summary based on the framework TDA and BOBLME thematic reports.

Attachment 2. Selected Relevant BOBLME Conventions and Agreements

	Conventions							
Legal Instrument	**Bangladesh**	**India**	**Indonesia**	**Malaysia**	**Maldives**	**Myanmar**	**Sri Lanka**	**Thailand**
Convention on Biological Diversity	R (08/96)	R (02/94)	R (08/94)	R (06/96)	R (11/92)	R (11/94)	R (03/94)	R (01/04)
	Selected Mandate/Agreements							
UN Fish Stocks Agreement[1]		08/03			09/00			
Jakarta Mandate on Marine and Coastal Biological Diversity[2]	R	R	R	R	R	R	R	R
UNEPs Regional Seas Agreements/ Programme[3]	A South Asian (1995)	A South Asian (1995)	A East Asian (1981)	A East Asian (1981)	A South Asian (1995)		A South Asian (1995)	A East Asian (1981)
Declaration and Global Programme of Action on Protection of the Marine Environment from Land-Based Activities	P	P	P	P	P		P	P
Committee of Fisheries (COFI)[3]	M	M	M	M	M	M	M	M

[1] Under UNCLOS (United Nations Conventions on the Law of the Sea which all BOBLME States except Thailand has ratified)
[2]Under CBD.
[3]Signifies agreement with the following "soft" law instruments: (i) Code of Conduct for Responsible Fisheries, (ii) FAO International Plans of Action, (iii) Rome Consensus on World Fisheries, and (iv) Plan of Action on the Sustainable Contribution of Fisheries to Food Security.

Key:

R = Ratified
P = Participant
A= Adopted
M=Member
Washington Declaration*

Attachment 3. International Institutions with BOB Mandate

Body	Objective	Countries								Mandate
		Bangladesh	India	Indonesia	Malaysia	Maldives	Myanmar	Sri Lanka	Thailand	
IOTC	Fishery Management		x		x			x	x	To promote cooperation between members for management, conservation and optimum utilization of tuna and tuna like species.
APFIC	Fishery Advisory	x	x	x	x		x	x	x	To promote utilization of living aquatic resources by development of fishing and culture operations.
BOBP-IGO	Fishery Advisory	x	x			x		x		A small scale fisheries development programme
SEAFDEC	Fishery Advisory			x	x		x		x	To develop fishery potentials in the region.
INFOFISH	Fishery Advisory	x	x	x	x	x		x	x	To provide marketing information and technical advisory service to the fishery industry of the Asia-Pacific region.
NACA	Fishery Scientific	x	x	x	x		x	x	x	Promotion of rural development through sustainable aquaculture.
APEC	Economic			x	x				x	To give trade liberalization and economic cooperation further impetus and high-level commitment, to develop a spirit of community in the region and to promote sustainable growth and equitable development.
ASEAN	Economic			x	x		x		x	To accelerate economic growth, social progress and cultural development.
BIMSTEC+2	Economic	x	x				x	x	x	To foster socio-economic cooperation amongst member states.
SAARC	Economic	x	x			x		x		Economic and social development for people of South Asia.
IOMC	Economic			x				x		To enhance the economic and social development of Indian Ocean states
The Colombo Plan	Economic	x	x	x	x	x	x	x	x	An international economic organization for the strengthening of economic and social development in developing states in Asia and the Pacific.
SACEP	Environmental	x	x			x		x		To protect and manage the marine environment and related coastal ecosystems of the region
SAS	Environmental			x	x	x			x	To create an environment at the regional level, in which collaboration and partnership in addressing environmental problems of the South Asian Seas, between all stakeholders, and at all levels is fostered and encouraged; and to enhance the capacity of the participating governments to integrate environmental considerations into national development planning.
IOCINDIO	Research	x	x	x	x	x	x	x	x	To promote and coordinate programmes that demonstrate and enhance the value of marine sientific research and systematic observations of the ocean in resolving the needs of member states.
WFC/Gofar*	Research		x	x	x			x	x	An ecosystem multidisciplinary partnership approach to fisheries research and development: improved productivity, environmental protection, saving biodiversity, improving policies and strengthening national programmes.

* International Mandate

IOTC	Indian Ocean Tuna Commission
APFIC	Asia-Pacific Fisheries Commission
BOBP-IGO	Bay of Bengal Programme Inter-Governmental Organisation
SEAFDEC	South East Asian Fisheries Development Centre
INFOFISH	Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia – Pacific Region
NACA	Network of Aquaculture Centres for Asia
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
BIMSTEC	Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation
SAARC	South Asian Association for Regional Cooperation
IOMC	Indian Ocean Marine Affairs Co-operation
The Colombo Plan	Colombo Plan for Cooperative Economic and Social Development in Asia and the Pacific
SACEP	South Asia Co-operative Environment Programme
SAS	South Asian Seas
IOCINDIO	IOC Regional Committee for the Central Indian Ocean
WFC/Gofar	World Fish Centre, The Asia group of Fisheries and Aquatic Research

ANNEX 2: MAJOR RELATED PROJECTS

Title	Description	Country(ies)	Budget	Operational details
FAO Regional and inter-regional projects				
GEF through FAO Strategic Partnership for Mediterranean Large Marine Ecosystems (LMEs) - Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and its Coastal Areas	The main objective of this Regional Component under the Strategic Partnership is to promote and induce policy, legal and institutional reforms aimed at reversing marine and coastal degradation trends and living resources depletion, in accordance with what had been agreed by the countries in the SAP MED and SAP BIO to be reflected in their NAPs.	Inter-Regional	55,000	EP /INT/602/GEF 01 Mar 2006 31 Aug 2007
GEF through UNEP Reduction of Environmental Impact from Tropical Shrimp Trawling, Through the Introduction of By-catch Reduction Technologies and Change of Management	The overall objective of the project is to reduce discards of fish captured by shrimp-trawlers, primarily by introducing in a selected number of developing countries, technologies that reduce the catch of juvenile food-fish and other by-catch. The participating countries have themselves identified the capture of juvenile food-fish and discards as a non-sustainable practice and have therefore assigned priority to reducing the problem nationally. These countries will therefore contribute through research and management in the fields of marine biology and fishing-gear technology.	Global	4,450,000	EP /GLO/201/GEF 01 Jun 2002 31 May 2007
GEF through UNEP Protection of the Canary Current Large Marine Ecosystem (LME) - PDF-B	The primary objective of this PDF Activity is the preparation of a Transboundary Diagnostic Analysis (TDA) to identify the principal shared problems and their root causes, as well as national, regional and, particularly, transboundary priorities in the region. This will provide the basis for the subsequent development of an agreed regional Strategic Action Programme (SAP) for the solution of the identified problems, and the development of the Full Project. The project will maintain close linkages with mechanisms developed to address land and water-related environmental issues in the major river basins draining to the LME (Senegal, Volta) and the neighbouring GEF International Waters projects (Guinea Current LME, Benguela	Cape Verde, The Gambia Guinea, Guinea-Bissau, Mauritania, Morocco, Senegal	680,003	EP /INT/302/GEF 01 Apr 2004 31 Dec 2007

Title	Description	Country(ies)	Budget	Operational details
	Current LME). It is closely related to the regional implementation of the Global Programme of Action for Protection of the Marine Environment from Land-Based Activities, relevant components and protocols of the Abidjan Convention and those of the Accra Ministerial Declaration.			
Scientific Basis for Ecosystem-Based Management in the Lesser Antilles including interaction with Marine Mammals and Other Top Predators	The longer-term development objective is the maintenance of ecosystem functioning, marine resources and fish production, through sustainable and responsible fisheries conduct.	Antigua and Barbuda Barbados Dominica Grenada Regional Latin America Saint Kitts & Nevis Saint Lucia St Vincent & Grenadines Trinidad and Tobago	4,223,434	GCP /RLA/140/JPN 01 Sep 2002 31 Dec 2007
Support to Safety at Sea for Small-scale Fisheries in Developing Countries - Global with Core Activities in West Africa and South Asia (Dec 2006/Dec 2008)	To improve the livelihood of the coastal populations and especially the small scale fishing communities.	Bangladesh Cape Verde Gambia, Republic of Global Guinea Guinea-Bissau India Maldives Mauritania Senegal, Republic of Sierra Leone Sri Lanka	1,134,000	GCP /GLO/158/SWE 01 Jan 2007 31 Dec 2008
Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries	Strengthen regional and country specific efforts to reduce poverty and create conditions to assist in the achievement of food security through development of sustainable fisheries management regimes and specifically through the application of the ecosystem approach to fisheries in a number of developing countries at global level, with an early emphasis on Sub-Saharan Africa. Staff of the fisheries research institutions and management administrations in the participating countries provided with additional knowledge on their ecosystems and on EAF principles for their use in planning and monitoring.	Inter-Regional	16,650,810	GCP /INT/003/NOR 01 Dec 2006 30 Nov 2011

Title	Description	Country(ies)	Budget	Operational details
International Cooperation with the NANSEN Programme: Fisheries Management and Marine Environment	In line with the relevant objectives of the Nansen Programme and the Medium-Term Plan for FAO's Department of Fisheries, the longer-term development objective of the present project aims at an enhanced self-sufficiency in fisheries management and research on the fish resources and their marine environment in the beneficiary partner countries, thus enabling them to achieve a rational utilization of the marine living resources, including improved protection of the marine environment, so as to be able to realize a sustainable supply of valuable fish products as a contribution to adequate food security, and as a source of regular employment for fisherfolk.	Inter Regional	501,991	GCP /INT/730/NOR
CITES and Commercially-exploited Aquatic Species, Including the Evaluation of Listing Proposals	The target beneficiaries will be the FAO Members and CITES Parties who will be better informed on suitable criteria and standards for evaluating the conservation status of commercially-exploited aquatic species and the implications of a listing of such species. The scientific and management staff serving in national fisheries institutions will also be immediate beneficiaries with improved capacity to comply with CITES regulations for listed species and to continue to harvest listed resources sustainably. The ultimate beneficiaries will be the fishers and consumers for whom well informed decisions and the ability to implement CITES regulations effectively should minimise the negative social and economic impacts of CITES and will ensure that the Convention provides suitable protection to threatened species where appropriate. In the BOB area this particularly pertains to shark fisheries.	Inter Regional	1,232,001	GCP /INT/987/JPN 01 Dec 2005 30 Nov 2010
Component B: Tuna Fisheries Western and Central Pacific	Improvement of the management, hence sustained production from and conservation of the world's fisheries. The immediate objectives of the overall project are: Development of a Fisheries Global Information System (FIGIS); Technical support for proposed arrangements for the management of tuna fisheries in the Western and Central Pacific Ocean; Formulation of international Plans of	Inter Regional	69,000	GCP /INT/715/JPN 07 Jan 1999 31 Dec 2007

Title	Description	Country(ies)	Budget	Operational details
	Action intended to ensure the management of fishing capacity, the conservation and management of shark fisheries, and the reduction of incidental catches of sea-birds in long-line fisheries; Further knowledge regarding the Sustainable Contribution of Fisheries to Food Security.			
Promotion of Responsible Fisheries Management	The project will focus on the implementation of one of WSSD related actions considered as critical for the sustainable use of living marine resources. The project is complementary to efforts presently ongoing in FAO and follows largely from recommendations of the 26th Session of the FAO Committee on Fisheries (COFI) in 2005.	Inter Regional	598,900	GCP /INT/037/ROK 01 Jan 2007 31 Dec 2009
Supervision of CFC Project "Promotion of Processing and Marketing of Value-Added Tuna Products from Islands Countries in the Asian Pacific	Small promotional project focussing on improved marketing and information, in collaboration with INFOFISH.	Regional Asia & Pacific	45,000	GCP /RAS/190/CFC 27 Aug 2002 30 Jun 2007
Interaction between Sea Turtles and Fisheries within an Ecosystem approach to Fisheries Management	The longer-term development objective is the contribution to improved and effective fisheries management and conservation of sea turtle populations at a global level, with minimum disruption to responsible fisheries through successful implementation of ecosystem approaches in fisheries. The medium term objective is to facilitate and enable policy makers at a global level to develop and implement improved management plans for conservation and use of their marine resources as a whole, including sea turtles, and with optimized social and economic benefits derived from utilization of marine ecosystems.	Inter Regional	1,048,535	GCP /INT/919/JPN 01 Apr 2004 31 Mar 2009
Towards Sustainable Aquaculture: Selected Issues and Guidelines	The longer-term development objective is the contribution to the production of safer fish products from aquaculture in a sustainable framework. The immediate objective of this component will be to prepare technical guidelines for the operative and practical implementation of the Recommended Code of Practice for Fish and Fish Products, regarding HACCP and GHP in aquaculture production, with reference to culture	Inter Regional	500,000	GCP /INT/936/JPN 01 Jan 2005 30 Nov 2009

Title	Description	Country(ies)	Budget	Operational details
	and conditions of developing countries; organization of pilot workshops to demonstrate the application of these technical guidelines at the fish farm level.			
Organic Aquaculture in Myanmar, Thailand and Malaysia	To explore and promote the development of organic aquaculture production in the participating countries.	Malaysia Myanmar, Union of Regional Asia & Pacific Thailand, Kingdom Of	45,000	MTF /RAS/231/CFC 01 Mar 2007 28 Feb 2010
Gap analysis of existing knowledge and data sources as compared to the needs of coastal managers for information	As part of the inception process for the Mangroves for the future initiative, FAO will undertake the following activities : Reporting on existing information systems for coastal zone management; identifying gaps in information required for coastal management; Recommendations for coastal zone management information collection, storage and sharing.	India Indonesia Maldives Regional Asia & Pacific Sri Lanka Thailand, Kingdom Of	159,000	GCP /RAS/234/UCN 05 Nov 2007 - 30 Jun 2008
Capacity building in support of Cleaner Fishing Harbours	The overall objective of the project is to build the technical knowledge and institutional capacity to upgrade fishing harbours to meet international standards necessary for fish quality assurance, to develop self-sustainable management capacities and to raise the income earning opportunities from fishing, in particular, for poor households.	Gujarat, Orissa	302,000	Symbol: TCP/IND/3102 Operationally active EOD: 01/05/2006 NTE: 31/10/2007
Coordination and Technical Support Unit to Tsunami Rehabilitation and Reconstruction in Fisheries and Aquaculture	The development objective of the project is to establish sustainable livelihoods in the coastal communities affected by the tsunami; The main immediate objective is coordinated national sector rehabilitation and reconstruction programmes, with related activities under implementation, covering all identified priority needs.	Global (Tsunami affected countries)	1,655,844	GCP /INT/984/MUL Operationally active 1-Dec-05 31-Dec-07
MoU between UNDP and FAO for Technical Support to Fisheries Sector of the Post-Tsunami Recovery Framework	Coordination and assistance in the fisheries sector to the Joint UN System Post-Tsunami Rehabilitation team responsible for the detailed formulation of programmes, the implementation of the UN recovery framework and for liaison and co-ordination with the Government in	India (Tsunami affected countries)	55,747	UNTS/IND/001/UNJ Operationally active 1-Feb-06 31-Jan-08

Title	Description	Country(ies)	Budget	Operational details
	terms of programmatic direction and NGO partners for dialogue and implementation; Technical advice and guidance from FAO's international fisheries staff to ensure coherent programme activities and high quality of results and outputs. These technical inputs may also include relevant policy advice to state and central governments and recommendations for greater donor-funded project harmonization.			
Rehabilitation of livelihoods in the fisheries sector affected by the tsunami and earthquake in Indonesia	To re-establish sustainable livelihoods in the coastal communities affected by the tsunami.	Aceh, Indonesia	1,308,434	GCP /INS/076/GER 1-Jan-06 30-Nov-08
Support to Safety at Sea for Small-scale Fisheries in Developing Countries	To improve the livelihood of the coastal populations and especially the small scale fishing communities.	S Asia, W Africa	1,134,000	GCP /GLO/158/SWE 3-Jan-07 31-Dec-08
Fish marketing information for NAD	The overall goal of the project is that NAD produces good quality and economically competitive fish products for local, national and international markets	NAD, Aceh, Indonesia	401,000	GCP/INS/078/SPA 1-Jan-08 31-Dec-08
Rehabilitation and sustainable development of fisheries and aquaculture affected by the tsunami in Aceh Province, Indonesia	To rehabilitate and develop sustainable fisheries and aquaculture in coastal communities affected by the tsunami in Aceh Province, Indonesia.	Aceh, Indonesia	7,554,260	OSRO/INS/601/ARC 19-Feb-07 30-Jun-10
Supporting Development of Strategies for Enterprise Promotion and Sustainable Livelihoods in the Fisheries Sector in Orissa	Comprehensive policy formulated and strategic plans developed; Regulatory framework reviewed and improved and appropriate guidelines developed. (Policy Analysis at Institutional level); Capacity building of the nodal and partner departments (e.g. Dept. of Water Resource) to develop and implement pro-poor strategies in the fisheries sectors.	India	100,000	IND/00/.../A/01/34 Active pipeline
Fisheries Management information for Planning and Sustainable Resource Use in Aceh	NAD produces good quality and economically competitive fish products for local, national and international markets	Aceh, Indonesia	395,000	GCP /INS/078/SPA Active pipeline
Capacity enhancement of NARA for marine resource surveys and stock assessments in coastal waters of Sri Lanka	The overall objective of the project is to assist the efforts of the government to build and maintain a coastal fisheries resource information base for development planning purposes and ensure sustainable use of resources;	Sri Lanka	1,002,000	GCP /SRL/054/CAN

Title	Description	Country(ies)	Budget	Operational details
	The specific objectives are to: i. Enhance NARA's skills for conducting resource surveys and stock assessments by enabling its researchers to learn on-the-job; ii. Upgrade NARA's logistics, capacities and facilities in the conduct of resources surveys and fish stock assessment activities; iii. Strengthen and maintain the knowledge base on coastal fish resources; iv. Introduce participatory management of coastal fisheries resources.			
Joint FAO-IMO Project Proposal for Tsunami reconstruction and rehabilitation - Small Fishing Vessel Safety	The long-term development objective is to assist countries in their capacity building through tsunami rehabilitation and reconstruction process which in turn will improve the livelihood of the coastal populations and especially the small scale fishing communities.	Tsunami Regional	378,000	GCP /RAS/224/IMO Active pipeline
Enhancement of coastal fisheries resources and lifting up living standard of Bang Saphan Bay fishers	There are three main objectives which the project expected to achieve. 1. To increase blue swimming crab resources in the bay which will help to increase income of the fishers' family in the bay and in vicinity 2. To increase available funding (through a revolving fund) for fishing gear replacement for the 6 fisher groups. 3. To establish a network and strengthen collaboration of 6 fisher groups in the bay.	Thailand	10,000	TFD-05/THA/006
Regional fisheries livelihoods programme for Southeast Asia (Cambodia, Indonesia, Philippines, Sri Lanka, Timor Leste and Vietnam)	Strengthened capacity among participating small-scale fisher communities for self-help towards improved livelihoods and for implementing fisheries co-management, with the support of national and regional level organizations.	SE Asia	20,000,000	GCP/RAS
Livestock waste management in East Asia - Letter of Agreement for Full Sized Project (FSP) (World Bank/FAO)	The objective of the project is to reduce the negative local and global environmental impacts of rapidly increasing livestock production in selected watersheds in the coastal areas of China, Thailand, and Vietnam. The project will support an integrated and comprehensive approach to managing animal-induced pollution.	China Peoples' Republic Regional Asia & Pacific Thailand, Kingdom Of Viet Nam	1,000,000	GCP /RAS/215/WBG 01 Sep 2006 31 Aug 2011

World Bank				
Coral Reef Monitoring Network in the Member States of Indian Ocean (World Bank/GEF)	The Coral Reef Targeted Research and Capacity Building for Management Project for the East Asia and Pacific Region, funded by the Global Environment Facility through the University of Queensland in Brisbane, Australia, aims to align, for the first time, the expertise and resources of the global coral reef community around key research questions related to the resilience and vulnerability of coral reef ecosystems, to integrate the results, and to disseminate them in formats readily accessible to managers and decision-makers	East Asia And Pacific	22,300,000	Active SEP-2004 30-MAY-2010
Coral Reef Rehabilitation and Management Program (II) Indonesia	This Second Coral Reef Rehabilitation and Management Project is the second phase of a fifteen-year Adaptable Program Loan (APL), a lending instrument selected because community-level interventions aimed at enhancing capacity for resource management, and changing behaviour patterns from destructive to sustainable practices, require significant time and effort.	Indonesia	67,100,000	Active 25-MAY-2004 31-DEC-2009
Mekong River Water Utilization	The objective of the Water Utilization Project is to assist the member states of the Mekong River Commission (MRC): Cambodia, Laos, Thailand, and Vietnam, to establish mechanisms to promote and improve coordinated and sustainable water management in the Basin, including reasonable and equitable water utilization by the countries of the Basin and protection of the environmental aquatic life and ecological balance of the Basin.	Mekong River Commission	16,300,000	Active 03-FEB-2000 30-JUN-2008
Marginal Fishing Communities Development Project	Establish viable collaborative coastal ecosystem management in participating districts. The proposed areas under collaborative management are globally significant coastal and marine ecosystems (including key species) which contribute to the livelihood and food security of resource dependent users.	Indonesia	100,000,000	Pipeline
Marine Biodiversity Protection and Management	This project will protect critical sites for marine biological diversity, including coral reefs, mangroves and seagrass areas, within the core zones of large multiple-use marine protected areas (MPAs) in the Aleipata and Safata Districts of Upolu Island. It will demonstrate a model and innovative district-level approach to community-based management and protection of marine biodiversity that has wider application in Samoa, the Pacific Islands region, and globally.	Samoa		Active
Hon Mun MPA Pilot Project, (Vietnam)	To enable local island communities to improve their livelihoods and in partnership with other stakeholders to effectively protect and manage the marine biodiversity at Hon Mun as a model for collaborative MPA Project management in Vietnam.	VietNam	2,173,000	Active 17-JUL-2000 n/a

Conservation and Sustainable Use of Mesoamerican Barrier Reef (regional)	The Conservation and Sustainable Use of the Mesoamerican Barrier Reef System (MBRS) Project, will assist Belize, Guatemala, Honduras, and Mexico in managing the MBRS as a shared, regional ecosystem; safeguard biodiversity values, and functional integrity; and, create a framework for its sustainable use.	Mexico, Honduras, Guatemala, Belize	11,030,000	Closed
Coastal and Marine Biodiversity Management Project	The Coastal and Marine Bio-diversity Management Project in Mozambique, will test, and refine an approach to sustainable economic development of coastal zone resources, through a strategic development planning process, to balance ecological, social, and physical values in the coastal zone. This pilot project is part of a long-term national coastal zone programme, designed to subsequently adopt, and broadly replicate through the entire coastal zone.	Mozambique	10,600,000	Active 01-JUN-2000 31-DEC-2007
Caribbean Archipelago Biosphere Reserve : regional marine protected area system project	The project's development objective is to design and implement a system of marine protected areas (MPAs) zoned for multiple uses and managed to reduce human threats in cooperation with local communities in the Archipelago's oceanic reefs in the western Caribbean.	Colombia	700,000	Active 30-JUN-2000 N/A
Coastal Contamination Prevention and Marine Management Project	The Coastal Contamination Prevention and Marine Management Project in Argentina, aims at reducing pollution in the Patagonia marine environment, and improve sustainable management of the marine biodiversity. The three main components will: 1) improve preparedness, and responsiveness to maritime pollution, and oil spills, and 2) prevent ship-based pollution.	Argentina	18,760,000	Active 26-JUN-2001 30-JUN-2008
Strategic Action Program for Red Sea and Gulf of Aden	Components 2 and 6 of the Bank's implementation of the Strategic Action Programme (SAP) for the Red Sea and Gulf of Aden Project aim to improve coastal and marine environments by reducing navigation risks and supporting integrated coastal zone management (ICZM).	Djibouti, Egypt, Jordan, Somalia Sudan, Yemen	5,610,000	Active 23-FEB-1999 30-JUN-2005
Lake Victoria Environmental, Management Project	The LVEMP is a comprehensive program aimed at rehabilitation of the lake ecosystem for the benefit of the people who live in the catchment, the national economies of which they are a part, and the global community. The programme's objectives are to: (a) maximize the sustainable benefits to riparian communities from using resources within the basin to generate food, employment and income, supply safe water, and sustain a disease free environment; and (b) conserve biodiversity and genetic resources for the benefit of the global community. In order to address the tradeoffs among these objectives which cut across national boundaries, a further project objective is to harmonize national management programmes in order to achieve, to the maximum extent possible, the reversal of increasing environmental degradation.	Kenya, Tanzania, Uganda	77,810,000	Closed

Integrated Coastal Management (Georgia)	The objective of the Integrated Coastal Management Project in Georgia is the institutional strengthening for a better management of the coastal resources of the Black Sea. In order to achieve an economic development along the coastal areas, the project aims to effectively integrate environmental planning and management, through the development, test and evaluation of different methods. To this end, the project includes five components. First the establishment of an institutional and legal framework, thus facilitating intersectoral planning and participation.	Georgia	7,600,000	Closed 17-DEC-1998 28-FEB-2007
Baltic Sea Regional Project	The development objective of the Baltic Sea Regional Project (Phase One) is to create some preconditions for application of the ecosystem approach in managing the Baltic Sea Large Marine ecosystem in order to achieve and maintain sustainable biological productivity of the Baltic Sea. The project activities will take place in Estonia, Latvia, Lithuania, Poland, and the Russian Federation, along their Baltic coastal areas and in the adjacent coastal and open sea area.	Estonia, Latvia, Lithuania, Poland, Russian Federation	12,120,000	Closed 25-FEB-2003 30-JUN-2007
Coastal, Marine and Biodiversity Management	The overall development objective of the Coastal, Marine and Biodiversity Management GEF Project for Guinea is to promote rational management of Guinea's coastal biodiversity for both conservation and sustainable development ends in selected priority areas, with a particular emphasis on assisting communities in and around these priority areas, to plan, implement and maintain environmentally sustainable and socially inclusive alternative livelihoods options.	Republic of Guinea	23,530,000	Active 22-JUN-2006 31-DEC-2011
Tanzania Marine and Coastal Environment Management Project	The Tanzania Marine and Coastal Environment Management Project aims to strengthen the sustainable management and use of the Borrower's Exclusive Economic Zone, territorial seas, and coastal resources resulting in enhanced revenue collection, reduced threats to the environment, better livelihoods for participating coastal communities living in the Coastal Districts, and improved institutional arrangements.	Tanzania	62,750,000	Active 21-JUL-2005 31-AUG-2011
Integrated Marine and Coastal Resources Management Project	The project's development objective is to increase the sustainable management of marine and coastal resources in three pilot areas by communities and the Government of Senegal. Sustainable management includes responsible exploitation of resources combined with protection of the ecosystems and ecological processes critical for their replenishment.	Senegal	11,490,000	Active 01-NOV-2004 01-JUN-2010
Mozambique: Coastal And Marine Biodiversity Management Project	Supplementing a grant of $4.1 million from the Global Environment Facility (GEF), the funds support the Coastal and Marine Biodiversity Management Project, which is a key element of	Mozambique	10,600,000	Active 01-JUN-2000 31-DEC-2007

	Mozambique's National Coastal Zone Management Programme--in particular its strategy for coastal and marine biodiversity protection and sustainable use of natural resources. The project will pilot and refine an approach through strategic development planning that balances ecological, social and physical values with the varying development interests in the coastal zone.			
Nile Transboundary Environmental Action Project (regional)	The Nile Basin Initiative (NBI) is a transitional mechanism that includes nine Nile riparian countries-Burundi, Democratic Republic of the Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda-- as equal members in a regional partnership to promote economic development and fight poverty throughout the Basin. The vision of the NBI is to achieve sustainable socio-economic development through the equitable utilization of and benefit from, the common Nile Basin water resources.	Nile Basin Initiative	43,600,000	Active 08-APR-2003 30-SEP-2008

ANNEX 3: RESULTS FRAMEWORK AND MONITORING

Results Framework **Global Environment Objective(GEO)/Project Development Objective (PDO)**	**Outcome (Process) Indicators**	**Use of Results Information**
Global Environment Objective To formulate an agreed on SAP whose implementation over time will lead to an environmentally healthy BOBLME.	– A Regional Strategic Action Plan (SAP) establishing priorities for action (policy, legal and institutional reform and investments) to resolve priority environmental problems in BOBLME endorsed and adopted by participating governments, whose implementation over time is expected to lead to enhanced food security and reduced poverty for coastal communities in the BOB region	– By YR5, there will be a sound basis for Regional coordinated action for the management of the Bay of Bengal based on endorsed National SAPs
Project Development Objective To support a series of strategic interventions that will provide critical inputs into the SAP whose implementation will lead to enhanced food security and reduced poverty for coastal communities.	– Proposed actions in the SAP address the well-being of fisher communities through promoting regional approaches to resolving resource issues and barriers affecting their livelihoods.	– Public consultations on national SAPs completed by PY4 – Mid-term evaluation endorses achievements and does not recommend significant rephrasing or reorientation of approaches – Final evaluation concludes the project has met its development objective

Intermediate Results (one per component)	**Results Indicators for Each Component**	**Use of Outcome Monitoring**
Component One:	**Component One:**	**Component One:**
Long-term sustainability of the BOBLME Program ensured.	– Transboundary Diagnosis Analysis to identify environmental concerns and root causes of environmental degradation completed through an effective inter-governmental process and endorsed by respective governments. – Permanent institutional arrangements agreed to and established for the long-term management of the BOBLME – Financial recommendations formulated – 8 National SAPs completed and agreed – One Regional SAP completed and agreed – Establishment of conditions leading to the creation of a permanent Regional agreement on fisheries - Full-size project for second phase of BOBLME programme completed	– Review arrangements and adequacy of methodological guidance if noticeable uneven commitment/engagement of respective government counterparts in TDA process by YR2; – Collection and analysis of post-tsunami environmental studies by PY2. – Regional analysis completed by PY 2 – Review arrangements if regional institutional analysis not completed by PY 2 – Reinforce consensus building if inter-ministerial agreement not reached by PY 5. – By YR2 - Review and revise SAP formulation process if national SAP teams and regional SAP team not functional by YR2 or less than 75% of stakeholders are involved in national SAP processes; – Public consultations of national SAPs completed by PY 4 – By YR4 – Review approach if less than six national SAPs not completed, public consultations on National SAP if less than six completed or less than six national SAPs not endorsed by respective governments. – Establishment of regional SAP team by PY3 – Review consensus building process if Inter-ministerial conference cannot be convened beginning of YR5 – Interim Regional Fishery Task Force created by PY3. – Fisheries management incorporated into Regional SAP for endorsement by end PY4

Component Two:	**Component Two:**	**Component Two:**
Regional and sub-regional collaborative management approaches applied to priority issues and barriers affecting coastal/marine living natural resources in the BOBLME and the livelihoods of dependent fisher communities.	– National pilot areas(s) benefiting from community based integrated coastal management, alternative livelihoods opportunities within a co-management framework – Six policy reforms in support of community-based integrated coastal fisheries management (ICM) approved. – Regional statistical data protocols signed. – Three fishery management plans developed and being applied to the management of regional/sub-regional fish stocks. – Bi-national management plans for critical transboundary ecosystems developed and approved by respective governments and institutional arrangements for their implementation established and functional.	– Pilot area(s) identified and stock taking complete by PY2 – Confirm if local capacity strengthened sufficiently to support policy reforms by PY4 – Ascertain if "lessons learn" substantiate need for meaningful policy reform by PY2 – Documented policy available by PY3 – Regional statistical sub-committee established in PY1 – Ascertain if joint data collection /sharing for respective fisheries occurring by PY3 – Review progress if bi-national committees not created by PY2 and bi-national institutional arrangements not established by YR5 – Review progress if sector plans not developed by YR5
Component Three:	**Component Three:**	**Component Three:**
Increased understanding of large-scale processes and ecological dynamics and inter-dependencies characteristic of the BOBLME.	– Agreed to plan of studies needed to address key data gaps serving as barriers to improving understanding of large-scale oceanographic and ecological processes controlling BOBLME living marine resources. – FSP in support of improved management of existing and creation of new MPAs approved and implemented. – Establishment of regional MPA monitoring programme – Partnerships established with regional and global environmental programmes and effective sharing of information in improving understanding of BOBLME processes	– Completion of data inventory by PY 1. Revise strategy if data inventory not completed. – FSP proposal prepared and submitted by PY 3. – Design of monitoring programme and candidate sites identified by PY 2. – Adjust approach if working group of MPA experts not established and functional by YR 1 – 1st planning meeting of regional MPA managers held by PY2.

	– Geo-referenced data base established and effective sharing and exchange of information amongst participating BOBLME countries	– Review progress and approach if less than 5 regional/global programmes not collaborating with BOBLME programme – Review and adjust if GIS data base inventories not completed in PY1
Component Four:	**Component Four:**	**Component Four:**
Institutional arrangements and processes established to support a collaborative approach to ascertain and monitor the health of the BOBLME and priority coastal water quality issues.	– Establishment of agreed to system-wide environmental health indicators – Strategy and action plan for regional pollution monitoring. – Pilot monitoring underway in selected "hot-spots" – BOBLME countries agree to water quality criteria	– National workshops completed by end of PY2. Revise strategy if no consensus reached on adequacy of existing indicators – National task forces created by end of PY1 and data bases inventoried by PY2 – Initial list of water quality parameters formulated by end of PY2. .Adjust strategy if countries unable to agree on initial broad list of indicators of water quality
Component Five:	**Component Five:**	**Component Five:**
Institutional capacity established to co-ordinate regional interventions, monitor project impacts, and disseminate and exchange information.	– Regional cooperation promoted through 6 meetings of the PSC – Project monitoring programme established and under implementation – Project results and "lessons learned" disseminated	– Determine by PY 2 level of participation of fisheries and environmental agencies of 8 countries in PSC meetings – Determine extent to which information is being shared amongst participating countries – Uptake monitoring of projects and agencies shows clear evidence of incorporation of BOLME approaches

Arrangements for Results Monitoring

Outcome Indicators	Baseline	Target Values					Data Collection and Reporting		
		Year 1	Year 2	Year 3	Year 4	Year 5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
– SAP, supported by permanent institutional arrangements and funding, is put in place to support regional collaborative activities, policy reforms, and sustainable management activities in the BOBLME.	None	-	-	-	-	1	Annual Regional Work Plan (ARWP) Report from mid-term review (MTR) Terminal Evaluation (TE)	M&E reports from project Mangement Information System (MIS) MTR TE	RCU FAO FAO
– Proposed actions in the SAP address the wellbeing of rural fisher communities through promoting regional approaches to resolving resource issues and barriers affecting their livelihood.	To be completed in PY 1	-	-	-	-	1	ARWP MTR TE	MIS MTR TE	RCU FAO FAO
Component One:									
– TDA finalized.	FTDA	25%	50%	100%	-	-	ARWP TDA PSC report	MIS	RCU
– BOBLME permanent institutional arrangements agreed to and established.	None	-	-	50%	100%		ARWP Legal document	MIS	RCU PSC
– Financial administrative recommendations formulated.	None	-	-	-	-	1	ARWP Legal document	MIS	RCU
– SAP completed and agreed to.	None	-	-	-	50%	100%	ARWP SAP	MIS	RCU
Component Two:									

– National pilot areas(s) benefiting from community based integrated coastal management, alternative livelihoods opportunities within a co-management framework	None	25%	40%	60%	80%	100%	ARWP Stock taking and policy reform needs reports	MIS	RCU Consultants
– Identification of site-specific policy reforms in support of community-based integrated coastal fisheries management (ICM).	None	-	10 %	50 %	70 %	100 %	ARWP Policy documents	MIS	RCU Consultants
– Establishment of conditions leading to a interim Regional Fishery Agreement	None	10%	30%	80%	100%		ARWP Legal documents	MIS	RCU Consultants
– Regional statistical data protocols signed.	None	-	-	-	3	-	ARWP Protocols	MIS	RCU BOBLME countries
– Fishery management plans developed and applied to the management of regional/sub-regional fish stocks.	None	-	-	-	-	3	ARWP Management Plans	MIS	RCU Fishery Task Forces
– Establishment of conditions leading to the creation of permanent bi-national commissions to manage critical transboundary ecosystems.	None	10%	20%	50%	80%	100%	ARWP Bi-national agreements	MIS	RCU Commissions
Component Three:									
– Agreed to plan of studies needed to address key data gaps serving as barriers to improving understanding of large-scale oceanographic and ecological processes controlling BOBLME living marine resources.	None	-	-	1	-	-	ARWP Study plan	MIS	RCU Consultants

– FSP in support of improved management of existing and creation of new MPAs/fish refugia approved and implemented.	None	-	-	1	-	-	ARWP Approved FSP proposal	MIS	RCU BOBLME countries
– Establishment of regional MPA monitoring programme	None	-	-	-	1	-	ARWP	MIS	RCU
– Development of a regional network of MPA managers	None	-	1	-	-	-	ARWP	MIS	RCU Consultants
Component Four:									
– Establishment of agreed to system-wide environmental health indicators.	None	-	-	-	1	-	ARWP System-wide plan	MIS	RCU Consultants
– Strategy and action plan for regional pollution monitoring.	None	-	-	1	-	-	ARWP Technical report	MIS	RCU Consultants
– BOBLME countries agree to water quality criteria (%).	None	-	-	30%	70%	100%	ARWP Regional agreement	MIS	RCU BOBLME countries
Component Five:									
– Regional co-operation promoted though meetings of the PSC.	None	1	1	1	1	1	ARWP PSC reports	MIS	RCU PSC
– Project monitoring programme established and under implementation.	None	1	-	-	-	-	ARWP	MIS	RCU
– Project results and “lessons learned” disseminated.	None	10%	20%	50%	80%	100%	ARWP Press releases Videos Website (# of “hits”) Uptake monitoring	MIS	RCU

ANNEX 4: DETAILED PROJECT DESCRIPTION

General Aspects

A great majority of the peoples of the world are dependent on coastal and marine resources for their food, livelihood and security. However, most of these resources are components of larger transboundary marine ecosystems which require multi-country approaches to their sustainable management and conservation. In this regard, the Bay of Bengal (BOB) is of particular importance given that some 400 million people live in its catchment, many subsisting at or below the poverty level. Key issues include: the unsustainable harvesting of certain species, continued degradation of highly productive coastal and near-shore marine habitats, and the accumulative effects associated with land-based sources of pollution contributing to the disruption of basic processes and functioning of the marine ecosystem. In addition to these long-standing and pervasive issues, the Bay of Bengal is strongly affected by storm surges, cyclones and other natural disasters, including the recent tsunami, that can devastate coastal populations. In addition to the massive human tragedy and the subsequent need to rebuild and restore communities' wellbeing, given the socio-economic importance of many of the region's coastal and near-shore marine habitats (coastal lagoons, mangroves, and coral reefs) as sources of livelihood to some of the most heavily impacted sectors of society (namely, poor, rural coastal communities), there is also a need to assess the status of these habitats and ascertain the implications to the future livelihoods of affected populations.

The existing and further degradation of the coastal and marine resources of the Bay will have a severe impact on quality of life and growth prospects in the region; an impact that is likely to be disproportionately felt by the poor who, directly or indirectly, depend on these aquatic systems for income generation and are least able to adapt to adverse changes in water quality, fish catch and other aquatic resources. Major root causes underlying these issues include: population growth and changing demographics, unabated pressure on the primary sector to feed exports due to continued demand for increased foreign exchange, a growing and diversifying industrial sector, and the undervaluing of the natural resources and the environmental "goods and services" provided by the coastal and near-shore marine ecosystems.

One of the key barriers to resolving these issues is the lack of regional institutional arrangements to facilitate a coordinated approach among the BOBLME countries to address the previously identified issues. Other major constraints include: the weak and/or inappropriate policies, strategies and legal measures that characterize much of the region; lack of alternative livelihoods; weak institutional capacity; insufficient budgetary commitments; and lack of community stakeholder consultation and empowerment. While there already exist a number of international, regional and sub-regional institutions and programmes operating in the Bay, none appear to have the mandate, geographical scope and/or capacity to support an initiative based on an LME approach; particularly one that addresses the shared and common issues and barriers characteristic of the BOB (see Annex 1 for more detail).

Four key principles were adopted by the BOBLME countries at the onset of project preparation that have guided the development of the full-scale project. These were:

(i) Unanimous agreement that the BOBLME countries would work together, on a regional, ecosystem approach, rather than at a sub-regional level (South Asia, Southeast Asia) in developing the Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP);

(ii) An action-oriented approach would be adopted, and on-the-ground activities that address identified priority transboundary issues would be initiated during the implementation of the full-scale project, concomitant with the completion of the TDA and the development of the SAP. The activities to be undertaken would complement and directly feed into the TDA and SAP process. The BOBLME countries wanted to ensure that the SAP would not end up as just another shelf document.

(iii) The SAP, the project's principal output, should initially focus on the management of living marine (fisheries) resources and the environmental threats to those resources. This approach in turn, could serve as a "stepping stone" to achieving eventual cooperation on a more comprehensive scale.

(iv) The BOBLME initiative should be envisaged as a long-term, 10-15 year, programme consisting of two implementation phases. The first implementation phase project, as conceived in the draft Project Brief, would culminate in the development of a Strategic Action Programme (SAP) and agreed institutional collaborative arrangements that could be put in place by the end of the six year project.

A key input into project preparation were the findings, recommendations, and consensual agreements reached stemming from a process that supported the development of the project's draft Framework TDA (FTDA). Using PDF-B funding, this process involved: (i) the establishment of a Project Steering Committee; (ii) the establishment of national task forces and national steering committees, (iii) a comprehensive literature review, (iv) preparation of national reports, (v) national consultations, (vi) regional thematic papers, (vii) international peer review, and (viii) experts' meetings. This process provided the opportunity for country participants to break down complex transboundary situations into smaller, more manageable components and activities; it was critical because the process served to identify the previously mentioned priority issues, barriers, and needed measures to address the issues and subsequently guided the development of the proposed project structure and activities. A list of key documents, chronology and major outcomes can be found in ***Annex 8***. Selected documentation in support of the BOBLME project preparation process has been posted on the website (http://www.fao.org/fi/boblme/website/index.htm).

The three issues identified as priorities by the countries through the FTDA process, capable of being analyzed though scientific, quantifiable, and politically neutral analyses of transboundary environmental problems scientifically were: (i) overexploitation of living resources, (ii) critical habitat degradation, and (iii) land-based sources of pollution. These were identified by the countries from the longer list of transboundary concerns that may have environmental effects but were not viewed as environmental problems per se (i.e., livelihoods, food security, absence of legal mechanisms and inadequate enforcement). These latter concerns were viewed as more appropriately analyzed as causes of the three aforementioned environmental concerns, and would be better addressed accordingly under their respective category for each of the three overarching environmental concerns in the TDA.

Once priorities were agreed to by BOBLME countries, a three day participatory logical framework workshop provided the basis for identifying a series of relevant activities to be supported under the project.[1] The common features among these activities were to: (i) promote the development of regional and sub-regional collaborative approaches among the 8 BOBLME countries to address one or more issues identified as transboundary priorities (either shared or common)[2]; and (ii) provide critical inputs in the form of experience and "lessons-learned" and "products" to inform the SAP formulation process and "enrich" and strengthen the SAP itself (see below).

Based on the previously described project preparation activities, the project's development objective is to support the development of a Strategic Action Programme (SAP) whose implementation will lead to enhanced food security and reduced poverty for coastal communities in the BOB region. Global benefits will accrue from the SAP's implementation which over time will lead to an environmentally healthy BOBLME.

The project has been structured into five interlinking components. At the national and regional workshops and Project Steering Committee meetings, the BOBLME countries stressed the need to initiate some of the priority transboundary activities to address critical issues that had been identified throughout the PDF-B process. The activities selected would furthermore contribute to the finalization of the TDA and the development of the SAP. The five components are described below, followed by a roadmap illustrating the inter-linkages between the technical components and the TDA/SAP process, and their timing as critical inputs into the finalization of the TDA and development of the SAP. The five components are:

1. Strategic Action Programme (SAP)
    1. TDA Preparation
    2. BOBLME Institutional Arrangements
    3. Sustainable Financing Strategy and Recommendations
    4. SAP Formulation and Adoption

2. Coastal/Marine Natural Resources Management and Sustainable Use
    1. Community-based Integrated Coastal Management (stocktaking)
    2. Improved Policy Harmonization (mainstreaming)
    3. Collaborative Regional Fishery Assessments and Management Plans
    4. Critical Habitat Management

3. Improved Understanding and Predictability of the BOBLME
    1. Improved Understanding of Large-scale Processes and Dynamics affecting the BOBLME
    2. Marine Protected Areas in the Conservation of Regional Fish Stocks
    3. Improved Regional Collaboration

4. Maintenance of Ecosystem Health and Management of Pollution
    1. Establishment of an effective Ecosystem Indicator Framework
    2. Coastal Pollution Loading and Water Quality Criteria

[1] See summary of 1st Technical Meeting held in Bangkok 27 -29 April, 2004 on the BOBLME website (http://www.fao.org/fi/boblme/website/index.htm).

[2] "Shared" issues are transboundary issues between to or more states while common issues are similar, occurring among all the 8 BOBLME countries but not necessarily transboundary in nature.

5. Project Management, Monitoring and Evaluation, and Knowledge Management
    1. Establishment of the RCU
    2. Monitoring and Evaluation System
    3. Project Information Dissemination System

Project outcomes will include: (i) a finalized Transboundary Diagnostic Analysis (TDA), including updating the environmental baseline following the recent tsunami, that would provide, *inter alia*, a location-specific assessment of critical transboundary concerns and the identification of "hotspots"; (ii) an agreed Strategic Action Programme (SAP); (iii) the establishment of permanent, institutional arrangements and identification of a identification of a sustainable financing mechanism/financial arrangements that will support the continued development and broadening of commitment to a regional approach to BOBLME issues; (iv) creation of conditions leading to improved wellbeing of rural fisher communities through incorporating regional approaches to resolving resource issues and barriers affecting their livelihoods into the SAP and future BOBLME Programme activities; (v) support for a number of regional and sub-regional activities designed to: (a) promote collaborative approaches leading to changes in sources and underlying causal agents contributing to transboundary environmental degradation (defined both as shared and common issues), and (b) provide critical inputs in the form of "lessons-learned" and "products" into the development of the SAP; (vi) development of a better understanding of the BOBLME's large-scale processes and ecological dynamics; (vii) establishment of basic health indicators and collation of baseline and assessment data in the BOBLME; (viii) increased capacity; and (ix) long-term commitment from the BOBLME countries to collaborate in addressing complex situations confirmed through adoption of an agreed institutional collaborative mechanism.

The project's principal output will be a Strategic Action Programme (SAP) whose objective would be to protect the health of the ecosystem and manage the living resources of the Bay on a sustainable basis to improve the food and livelihood security of the region's coastal population. The SAP will provide a comprehensive framework and include well defined institutional and financial arrangements required to ensure the long-term sustainability of the BOBLME Programme. It will also identify specific actions building on a number of demonstration activities supported under the first phase project, required to address the priority transboundary problems in the region. Potential investment, technical assistance and capacity-building interventions, both national and regional, will be proposed.

A key input into the SAP formulation process will be findings and recommendations from the TDA to be finalized in Project Year 3 (PY 3). While there is much work to be done to complete the TDA, the FTDA process clearly identified what the main priorities and root causes were in the BOBLME and initial activities needed to address same. The steps leading to the formulation of the SAP are provided in Attachment 1.

During the preparation of the FTDA, the occurrence of natural hazards generally and tsunamis specifically, were not identified as a priority. This situation changed dramatically on 26 December 2004. In response to the changed circumstances in the region, the BOBLME proposal, which had been prepared and endorsed by the countries pre-tsunami, was reassessed to ascertain where meaningful and compatible contributions could be made in a timely manner. The first and perhaps most significant contribution is the establishment of permanent institutional arrangements which will facilitate future BOBLME-wide collaborative actions to plan for and respond to future natural hazards affecting rural coastal populations. A second

contribution is to update the existing post-tsunami environmental "baseline" under the TDA subcomponent. This will provide a key input into other on-going and proposed coastal community and livelihood assessments to ascertain impacts on future income and well-being of affected populations. A third contribution, dependent on the priorities of the countries, could be the possible inclusion of a second tier Early Warning System (EWS), designed to expedite the transfer of hazard relevant information from national information nodes (typically located in the capital cities) to vulnerable rural coastal communities. Beyond these contributions, there exist a number of project activities that provide additional opportunities to equip rural coastal communities in the BOBLME region to better anticipate and respond to the occurrence storm surges, cyclones and other natural hazards, including future tsunamis. Examples are included in Attachment 2.

In light of the number of current activities and the rapidly changing situation in the tsunami-affected areas, flexibility has been built into the project so as to allow further definition of BOBLME-supported activities as the situation evolves. What is important, however, is early action on the approval of the project to ensure that BOBLME plays a meaningful role in the future assessment and rehabilitation and management effort. An operational BOBLME would also provide the framework of an ecosystem approach and sustainable fisheries management, a framework in which many donors that are providing emergency and rehabilitation relief are interested in collaborating. Once approved and operational, a regional workshop proposed under the TDA subcomponent (subcomponent 1.1) would provide a means to better assess how the Project can better contribute to other on-going and planned activities.

A second critical input will be the results of a series of demonstration activities identified through the previously described FTDA and Logical Framework processes. Activity design, projected outcomes ("lessons-learned" associated with past experiences and/or processes and "products"), and the timing of outputs will directly "feed" into and "enrich" the SAP formulation process. Illustrative of projected "lessons-learned" supported under project activities of particular relevance to the SAP include the experience associated with: (i) promoting policy change and harmonization among BOBLME countries (subcomponent 2.2); and (ii) achieving agreement on a coordinated, regional pilot pollution monitoring programme (subcomponent 4.2). Examples of particularly SAP relevant "product" outcomes include: (i) a programme of proposed studies to address critical data gaps impeding further understanding of BOBLME large-scale processes and dynamics (subcomponent 3.1); (ii) regional and sub-regional plans to achieve the sustainable management of transboundary fish stocks (subcomponent 2.3); and (iii) regional water quality monitoring strategy and action plan (subcomponent 4.2).

The relative schedules between the SAP process and selected component/subcomponent milestones have been mapped in Attachment 3.

The BOBLME project is a five year project with a total estimated budget of US$31 million. Project costs distributed by funding source are: (i) GEF US$12.1 million, (ii) BOBLME Member States US$5.7 million, (iii) Co-financiers US$12.4 million, and (iv) FAO US$0.8 million. Funds would be allocated among the components as follows: (i) 18 percent for Strategic Action Programme (Component 1); (ii) 47 percent for Coastal/Marine Natural Resources Management and Sustainable Use (Component 2); (iii) 21 percent for Improved Understanding and Predictability of the BOBLME (Component 3); (iv) four percent for Maintenance of Ecosystem Health and Management of Pollution (Component 4); and (v) ten percent for Project Management (Component 5).

All project-supported interventions are designed to act as catalysts to promote the implementation of a more comprehensive approach to the management of the BOBLME. The project will support interventions at four levels: (i) regional, (ii) sub-regional (defined as two to seven countries), (iii) national (inter-ministerial), and (iv) sub-national (at the level of the community).

At the regional level, key activities/outputs will include: (i) Transboundary Diagnostic Analysis (TDA); (ii) Strategic Action Programme (SAP); (iii) development of a regional shark management plan; (iv) a harmonized system of fish data collection and data/information sharing; (v) a process leading to the eventual establishment of a regional system of marine protected areas and fish refugia; (vi) a study identifying key data gaps and research priorities leading to an increased understanding of large-scale oceanographic and ecological processes in the BOBLME; (vii) closer collaboration with other regional and global environmental monitoring programmes; (viii) a process leading to an agreed set of environmental indicators to measure the health of the BOBLME; (ix) a regional pollution assessment and process leading to the development of water quality criteria; (x) permanent institutional arrangements and development of a financial sustainability mechanism and strategy; and (xii) a Regional Coordinating Unit (RCU).

At the sub-regional level, key activities supported under the project will include the development of fishery management plans for selected shared fish stocks. At the national level, key interventions include shared: (i) capacity building and training, (ii) improved policy framework, and (iii) information dissemination. At the level of the community, key interventions include participation in sub-regional and national activities (e.g., pilots, alternative livelihoods, etc.).

Detailed Description of Components

Component 1: Strategic Action Programme (US$5.4415 M, GEF US$2.7332 M).

Objectives: The objective of the component is to prepare a Strategic Action Programme (SAP) whose implementation will ensure the long-term institutional and financial sustainability of the BOBLME Programme.

Geographic scope: The scope of the component will be regional for all subcomponents.

Activities: The component's activities are described below by subcomponent.

Subcomponent 1.1 TDA Preparation:

Objectives: The objective of the subcomponent is to build on the BOBLME's existing draft Framework Transboundary Diagnostic Analysis (FTDA) and complete the programme's TDA.

Activities: To achieve these objectives, the subcomponent would support the following activities: (i) finalize the existing draft FTDA (currently being reviewed by BOBLME countries), (ii) address critical data gaps identified by the FTDA, (iii) update a post-tsunami assessment of critical coastal/marine habitats affected by the event, (iv) prepare a draft TDA,

(v) public consultations, (vi) finalization of the TDA, and (vii) government adoption of the TDA.

Target populations: The primary target groups are the national public stakeholders, existing and future partners, and individuals who would receive benefits over the long-term from a financially-sustainable BOBLME.

Expected results: The expected results will be: (i) a TDA; and (ii) an updated post-tsunami, environmental baseline of critical habitats suitable to provide the basis to ascertain if programme-supported activities are contributing to a healthy BOBLME.

Subcomponent 1.2 BOBLME Institutional Arrangements:

Objectives: The objective of the subcomponent is to identify and establish agreed to permanent institutional arrangements ensuring the long-term management of the BOBLME.

Activities: To achieve these objectives, the subcomponent would support the following activities: (i) comprehensive national and regional institutional analyses, (ii) consultative workshops, (iii) regional meetings, and (iv) an inter-ministerial conference.

Target populations: The primary target groups are national stakeholders, existing and future partners, and individuals who would receive benefits over the long-term from a more comprehensive approach to the management of the BOBLME.

Expected results: Agreed to institutional arrangements to manage the BOBLME Programme.

Subcomponent 1.3 Sustainable Financing Strategy and Recommendations

Objectives: The objectives of the subcomponent are to: (i) identify a possible financing mechanism(s) to fund, at least partially, the annual recurrent costs of an agreed on BOBLME management structure ensuring the continued beneficial impact of the BOBLME Programme; and (ii) assist BOBLME countries to prepare for the mobilization of financial resources and development of financial mechanisms for implementing specific actions that will be developed, agreed and included under the SAP (see below).

Activities: To achieve these objectives, the subcomponent would support the following activities: (i) establish an ongoing dialogue and relationship with potential partners and stakeholders, (ii) establish appropriate regional and national institutional mechanisms to generate and administer programme-related funds, and (iii) the testing of activity-specific financing mechanisms designed to cover their respective recurrent costs.

Target populations: The primary target groups are existing and future partners, stakeholders, and individuals who would receive benefits over the long-term from a financially-sustainable BOBLME.

Expected results: A partially, financially-sustainable BOBLME SAP.

Subcomponent 1.4 SAP Formulation and Adoption

Objectives: The objective of the subcomponent is to support the process leading to the formulation of an agreed Strategic Action Programme (SAP).

Activities: To achieve this objective, the subcomponent would support the following activities: (i) establishment of national (and a regional) SAP teams, (ii) review of previous experiences associated with SAPs, (iii) reaching consensus on ecological quality objectives (EcoQOs), (iv) political consultations, (v) preparation of national SAPs, (vi) preparation of the draft regional SAP, (vii) regional consultations, (viii) finalization of the SAP, (ix) national endorsements, (x) adoption by BOBLME governments, and (xi) publication and dissemination. The expected results are: a comprehensive framework and plan of action whose implementation will lead to a more healthy BOBLME and management of the living resources on a sustainable basis to improve the food and livelihood security of the region's coastal population (additional detail on the SAP preparation process can be found in Attachment 1).

Target populations: The primary target groups are the national public stakeholders, existing and future partners, and individuals who would receive benefits over the long-term from a financially-sustainable BOBLME.

Expected results: A comprehensive framework and plan of action whose implementation will lead to a more healthy BOBLME and management of the living resources on a sustainable basis to improve the food and livelihood security of the region's coastal population.

Component 2: Coastal/Marine Natural Resources Management and Sustainable Use (US$14.4615 M, GEF US$5.1568 M).

Objectives: The objective of this component is to promote the development and implementation of demonstrative regional and sub-regional collaborative approaches to common and/or shared issues which affect the health and status of BOBLME.

Geographic scope: The scope of the component will be at the regional level for subcomponents 2.1, 2.2, and one fishery management plan (sharks) proposed under 2.3. Sub-regional activities under subcomponent 2.3 are proposed for the Indian mackerel and Hilsa sub-regional fishery management plans.

Activities: The component's activities are described below by subcomponent.

Subcomponent 2.1: Community-based Integrated Coastal Management

Objectives: The objective of the subcomponent is to identify and evaluate the large and diverse body of information and experience associated with promoting: (i) community-based, fisheries and habitat management; (ii) co-management; and (iii) the creation of alternative livelihoods among fisher communities in the region; activities designed for purposes of reducing impact on coastal resources.[1] Specifically this subcomponent will complete a "stocktaking" exercise of the extensive experience in the BOBLME region and distil "lessons

[1] By convention, these three activities have been collectively termed "community-based integrated coastal management."

learned" to be used as a basis for supporting their "mainstreaming" through activities supported under subcomponent 2.2 below.

Activities: To achieve this objective, the subcomponent will support the following activities: (i) a literature review and synthesis of findings, (ii) stakeholder consultations through focus group encounters and facilitated workshops, (iii) site visits and development of pre-selected case studies, and (iv) completion of the analysis.

Target populations: The primary target groups are the fisher and other rural coastal communities who have participated in the past and/or will benefit in the future from sound ICM policies.

Expected results: The expected results at the end of the subcomponent will be an up to date overview of community-based ICM projects and activities supported in the BOBLME region supported by detailed analysis and "lessons learned" and accompanying specific policy recommendations.

Subcomponent 2.2: Improved Policy Harmonization

Objectives: The objectives of the subcomponent are to: (i) promote better understanding of the policy processes in the BOBLME region, (ii) enhance capacity in the formulation of policy and (iii) facilitate the exchange of information on policy and legislation among regional institutional stakeholders. The outputs of the subcomponent will support existing and future mainstreaming activities and provide critical inputs into the Strategic Action Programme (SAP).

Activities: To achieve these objectives, the subcomponent will support the following activities: (i) policy studies, (ii) national technical workshops, (iii) regional policy meetings, (iv) strengthening of capacity in local policy formulation, and (iv) creation of a normative documents portal.

Target populations: The primary target groups are the national and local policy makers. Secondary target groups include the people whose lives would benefit from improved policies (mostly rural coastal communities) and the research community.

Expected results: Improved environment and capacity to formulate policies supportive of sustainable community-based integrated coastal management.

Subcomponent 2.3: Collaborative Regional Fishery Assessments and Management Plans

Objectives: To introduce and promote collaborative fisheries management approaches for selected key transboundary species through the development of regional and sub-regional management plans and harmonization of data collection and standardization.

Activities: To achieve these objectives, the subcomponent would support the following activities: (i) development of a regional fishery management plan for sharks; (ii) development of sub-regional fishery management plan for Indian mackerel (Bangladesh, India, Indonesia, Malaysia, Myanmar, and Thailand); (iii) development of sub-regional fishery management plan for Hilsa (Bangladesh, India, and Myanmar); and (iv) design and implementation of a common fishery data/information system in the BOBLME.

Target populations: The primary target groups are the coastal fishers whose livelihoods depend on the shark, Indian mackerel, and Hilsa fisheries. Secondary target groups include commercial fishing interests and fishery managers.

Expected results: Improved management of selected transboundary fish stocks through the development of regional and multi-national fishery management plans, an improved data base, and more effective institutional arrangements.

Subcomponent 2.4: Collaborative Critical Habitat Management

Objectives: To promote multi-national approaches to manage and address issues affecting transboundary coastal/marine eco-systems within the broader BOBLME region. To achieve these objectives, two candidate sites, the Mergui Archipelago (Thailand and Myanmar) and the Gulf of Mannar (India and Sri Lanka), were initially selected and prepared for inclusion under this subcomponent, but, due to the prevailing situation, activities are postponed. The BOBLME countries will be invited to select alternative sites during PY1 and PY2. The specific objectives for each site are to support a series of activities that will lead to the development of a bi-national collaborative institutional approach and system-wide master plan to facilitate the joint management of the respective ecosystems.

Activities: To achieve these objectives, the subcomponent will support the following activities: (i) contribute to the updating of the existing environmental baselines; (ii) address major data gaps in the baselines associated with basic oceanography, fish larval patterns, rare and endangered species, and the prevailing current regime; (iii) develop a systematic monitoring programme based on current "best practices" in the region; (iv) develop and pilot alternative livelihood activities designed to mitigate existing non-sustainable fishing practices; (v) increase public awareness of the existence and significance of the ecosystems; and (vi) increase planning capacity and the development of bi-national management plans.

Target populations: The primary target groups in the two selected sites are the rural community coastal fishers whose livelihoods are based on healthy fish stocks and the underlying ecosystem on which the latter depend. Secondary groups include dive tour operators, tourists, coastal aqua-culturalists, and researchers.

Expected results: The expected results at the end of the sub-projects are: (i) conditions leading to the establishment of a permanent bi-national institutional arrangements supporting the sustainable management of the ecosystems, (ii) updated management plans, (iii) increased awareness among the public and decision-makers of the significance of these areas, and (iv) improved understanding of alternative livelihood opportunities for reducing pressure on the fishery resource.

Component 3: Improved Understanding and Predictability of the BOBLME Environment (US$6.6241 M, GEF US$2.3147 M).

Objectives: The objective of the component is to support activities and participate and share information with other regional and global environmental monitoring programmes which will lead to better understanding of the BOBLME ecological functions and processes.

Geographic scope: The scope of the component will be regional for all subcomponents.

Activities: The component's activities are described below by subcomponent.

Subcomponent 3.1 Improved Understanding of Large-scale Processes and Dynamics affecting the BOBLME

Objectives: The objective of the subcomponent is to contribute to an improved understanding of large-scale oceanographic and ecological processes controlling BOBLME living resources.

Activities: To achieve this objective, the subcomponent would support: (i) an inventory and collection of relevant data sets that measure past variability in the BOBLME and its links to system productivity (e.g., data on monsoonal related phenomena, meteorology, oceanography, ocean colour, and primary productivity); (ii) completion of eight national retrospective studies; and (iii) regional workshops to identify and assemble datasets, identify data gaps, and plan relevant studies.

Target populations: The primary target groups include the research community (primarily oceanographers and fishery scientists) involved in activities leading to an improved understanding of large scale processes in the BOBLME.

Expected results: Stocktaking of existing data sets and updating of existing knowledge of large scale processes characterizing the BOBLME and identification of critical data gaps and needed studies to obtain a better understanding of the relationships between large scale BOBLME environmental variability and its effect on living resources.

Subcomponent 3.2 Marine Protected Areas in the Conservation of Regional Fish Stocks

Objectives: The objective of the subcomponent is to develop a better understanding of and promote a more comprehensive approach to the establishment and management of marine protected areas and fish refugia for sustainable fish management and biodiversity conservation objectives.

Activities: To achieve this objective, the subcomponent would support the following activities: (i) establishment of a working group of regional experts in MPAs/fish refugia; (ii) review and updating of MPA/fish refugia classification criteria; (iii) inventory and updating of status of existing MPAs/fish refugia in the BOBLME; (iv) a gap analysis to assess effectiveness of existing system of MPAs in: (a) conserving biodiversity of global importance, and (b) providing critical habitat for priority transboundary fish stocks; (v) establishment of common regional data requirements and protocols to promote national efforts to establish MPAs/fish refugia; (vi) mapping existing and potential MPA/fish refugia sites with GIS technology; (vii) development of a regional action plan that would lead to the strengthening of existing and creation of new priority MPAs/fish refugia under a separate Full Size Project (FSP); (viii) training and capacity building; (ix) awareness and outreach activities; (x) supporting studies and (xi) preparation of a full sized project proposal for management of existing and creation of new MPAs.

Target populations: The primary target groups are the public bodies and/or rural fishing communities responsible for the creation and management of marine protected areas and fish refugia in the BOBLME region.

Expected results: Establishment of the necessary enabling conditions that will lead to the creation of one or more sub-regional/regional systems of MPAs/fish refugia in a subsequent BOBLME phase.

Subcomponent 3.3 Improved Regional Collaboration

Objectives: The objective of the subcomponent is to establish effective partnerships with other regional and global environmental assessment and monitoring programmes that would serve to achieve a better understanding of the status and processes characteristic of the BOBLME.

Activities: To achieve these objectives, the subcomponent could support participation in relevant activities and processes associated with one or more of the following programmes: (i) the Global International Waters Assessment (GIWA) of transboundary region # 55, once follow-up activities are determined; (ii) coastal module activities (e.g., sustainable fisheries and marine biodiversity) associated with the Indian Ocean Global Ocean Observing System (IOGOOS); (iii) Global Coral Reef Monitoring Network (GCRMN); (iv) strategies and measures supported under the regional implementation of the Global Plan of Action (GPA) in South Asian Seas; (v) UNEP's East and South Asian Seas Programmes; and (vi) the South Asia Co-operative Environment Programme (SACEP). In addition, the project would expect to coordinate closely with other relevant GEF-supported regional (e.g., the currently active Andaman Sea and Gulf of Mannar initiatives) and global (e.g., IW:LEARN) projects.

Target populations: The primary target groups include existing and future partners involved in environmental assessment and monitoring relevant to the BOBLME.

Expected results: Increased coordination and collaboration with other regional and global programmes leading to improved understanding of the BOBLME.

Component 4: Maintenance of Ecosystem Health and Management of Pollution (US$1.3398 M, GEF US$1.0172 M).

Objectives: The objective of the component is to support activities leading to an agreed on set of environmental indicators to measure the health of the BOBLME and the development of a regional collaborative approach to identifying important coastal water pollution issues and to develop remedial strategies.

Geographic scope: The project component is focused on the coastal waters of the Bay of Bengal and Straits of Malacca, and some of the major rivers that feed into them.

Activities: The component's activities are described below by subcomponent.

Subcomponent 4.1 Establishment of an effective Ecosystem Indicator Framework

Objectives: The objective of the subcomponent is to establish an agreed to ecosystem indicator framework designed to measure progress toward sustaining BOBLME health.

Activities: To achieve this objective, the subcomponent would support: (i) a series of national workshops to identify existing indicators of environmental health used in BOBLME countries, gaps, and development of a suite of indicators and accompanying quantitative

objectives; and (ii) a regional workshop to reach consensus of system-wide indicators, thresholds and targets, and timelines for achieving objectives.

Target populations: The primary target groups include representatives from national and state/provincial authorities responsible for assessing and monitoring a range of parameters reflecting environmental health of the BOBLME.

Expected results: Agreed on national and regional ecosystem frameworks designed to establish a common baseline and monitoring of future environmental health of the BOBLME.

Subcomponent 4.2 Coastal Pollution Loading and Water Quality Criteria

Objectives: Development of a regional collaborative approach to identifying important coastal water pollution issues and to develop remedial strategies.

Activities: Specifically, under this component, the BOBLME Project would support the following activities: (i) meetings (Think Tanks) to develop a coastal water quality monitoring mechanism for the region, investigate and propose ambient water quality criteria, develop approaches to addressing identified pollution hotspots, and provide background documentation to support a regional mechanism for managing pollution; (ii) address identified capacity needs for monitoring and managing water quality and disseminating information; (iii) develop a systematic coastal water quality programme capable of identifying pollution "hotspots" in relation to agreed criteria; (iv) annual technical meetings to discuss results obtained and their implications, provide support for problems encountered and share lessons learned; and (v) increase public awareness particularly among decision makers and the public of the pollution problems in the BOBLME and impacts on the region's shared ecosystem and its resources.

Expected results: A strategy and action plan for the implementation of a regional pollution monitoring and management programme which would include: (i) a monitoring design for the region; (ii) a mechanism for information-sharing, including GIS of monitoring results; (iii) agreed ambient water quality criteria; an initial list of priority "hotspots" identified during pilot monitoring; (iv) proposed corrective strategies and timeframes for reducing pollution loads to acceptable levels; and (v) building large-scale awareness of pollution issues in the region and the relationships between ecosystem health and human welfare.

Component 5: Project Management (US$3.1267 M, GEF US$0.860 M).

Objectives: The objective of the component is to establish a cost-efficient project management, M&E, and information dissemination capacity and process leading to the successful implementation of the BOBLME Programme.

Geographic scope:
The scope of the component will be regional for all subcomponents.

Activities: The component's activities are described below by subcomponent.

Subcomponent 5.1 Establishment of the RCU

Objectives: The objective of the subcomponent is to establish a regional coordinating unit (RCU) whose responsibility is to ensure the cost-effective coordination of all BOBLME supported activities leading to the finalization of the Strategic Action Programme.

Activities: To achieve this objective, the subcomponent would support the following activities: (i) recruitment of a mixed international and national staff, (ii) completion of arrangements with the host-government to support the RCU office, (iii) purchase of necessary equipment, and (iv) operations.

Target populations: The primary target groups are the partners, stakeholders, and beneficiaries of the BOBLME Programme.

Expected results: The successful execution of the BOBLME project (first phase) in a cost-effective manner.

Subcomponent 5.2 Monitoring and Evaluation System

Objectives: The objective of the subcomponent is to establish a cost-effective monitoring and evaluation system in conformity with existing FAO and World Bank policies and procedures.

Activities: To achieve this objective, the subcomponent would support the following activities: (i) recruitment of a monitoring and information specialist (costed under subcomponents 5.2 and 5.3); (ii) design (or purchase) of software to support computer-based M&E programme; (iii) provision of training to national coordinators (and outside regional contractors) to facilitate accurate data collection, formatting, and reporting to the RCU; and (iv) a mid-term and final project evaluation.

Target populations: The primary target groups are the partners, stakeholders, and beneficiaries of the BOBLME Programme.

Expected results: Successful execution of the 1st phase project of the BOBLME Programme, through the establishment of an accurate and transparent monitoring programme providing the basis to make timely decisions to address issues as they arise.

Subcomponent 5.3 Project Information Dissemination System

Objectives: The objective of the subcomponent is to disseminate information to regional and global stakeholders relevant to the BOBLME and the BOBLME Programme.

Activities: To achieve these objectives, the subcomponent would support the following activities: (i) contract the monitoring and information specialist (costed is divided under subcomponents 5.2 and 5.3), (ii) establish a dedicated website, (iii) press releases, (iv) development of promotional materials, and (v) the design and dissemination of country-specific audio-visual materials. In addition, the IW:LEARN Project, which is about to enter its second phase, could include hosting learning exchanges associated with the BOBLME through the IW:Learn website (www.IWLearn.net). These learning exchanges could feature, among other themes: (i) results associated with the ICM "stocktaking" and policy

"mainstreaming" subcomponents; (ii) experiences gleaned from promoting regional and sub-regional approaches to fisheries management; and (iii) approaches to reaching consensus on coastal water quality criteria.

Target populations: The primary target groups are the regional and global BOBLME stakeholders.

Expected results: Increased regional/global awareness about the objectives of, approach to, and "lessons-learned" derived from the BOBLME.

Attachment 1: SAP Formulation Process

Background and Approach to SAP specification

Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka, and Thailand have jointly identified the objective of the proposed project as being to elaborate an agreed Strategic Action Programme (SAP) for the BOBLME to address priority issues.

A draft Framework Transboundary Diagnostic Analysis (FTDA) has already been prepared under the PDF-B funding for the BOBLME. This FTDA, and its finalization during the initial stages of the project, will provide the factual basis for the formulation of the SAP. The SAP will set out specific actions for each country that can be adopted nationally but which will be harmonised with the other concerned countries. These actions will address key transboundary concerns and over the longer term, ensure the restoration and protection of the BOBLME.

The project activities specified below, the preparation of the SAP, and the actions contained within it, will all be undertaken based on a number of key underlying principles. These include:

- Full stakeholder participation and transparency, so as to generate a shared vision and responsibility.
- Use of an ecosystems approach, and guidance for fisheries management based on the FAO Technical Guidelines for Responsible Fisheries: The ecosystem approach to fisheries.
- Adaptive management and stepwise consensus building, with long-term environmental goals achieved through a series of pragmatic action-based steps, and measurement against agreed indicators. Within each step, agreed achievement indicators will be monitored and there will be a joint planning exercise to review progress and to plan the next step. It is likely that the adaptive management process will consist of:
    - Establishing long-term Ecosystem Quality Objectives (EcoQOs) for identified key problems
    - Agreeing upon the most practical and achievable short-term (project length) measures for making substantive progress towards resolving the problems
    - Setting time-limited operational objectives as project targets
    - Agreeing upon the appropriate a) process, b) stress reduction and c) environmental and living resource status, indicators to monitor progress and setting new operational objectives
    - Consulting with stakeholders on the proposals
    - Ensuring that the appropriate institutional measures are in place to oversee implementation of the agreed joint actions
- Action that takes into account social and economic root causes of the problem e.g. thinking about fisheries and marine environmental management in the wider rural development, cultural, macro-economic and political context.
- A strong emphasis on accountability, with parties committing themselves to implementing the SAP being fully accountable for their actions.
- Inter-sectoral policy building. Current systems of government in the region are highly sectoral in nature. In order to develop a pragmatic programme of action, direct

participation should be achieved by all the key sectors involved in the problems. In particular this requires the fisheries sector to engage with other sectors for cross-sectoral planning and advocacy

- Subsidiarity. Practical solutions to transboundary issues (e.g. regional fish stock management) require action at regional, national and sub-national (or local) levels. The SAP will clearly address the balance between regional and national actions, attributing the most appropriate implementation mechanism to each level of action.
- Government commitment. Approval or adoption of the SAP as a binding agreement between governments is seen as crucial to the process.

SAP Formulation Activities

The specification of the SAP will be completed by following a number of steps, based on the "GEF IW TDA/SAP Process Notes on proposed best practice approach". These steps, the activities associated with them, the individuals/institutions involved, and the calendar of activities, are described in Table 1 below. Monitoring indicators follow in Table 2.

Table 1: Steps in the SAP Formulation Process

Step	Activities	Individuals/institutions involved and related inputs	Calendar
1. Review of other SAPs and establishment of National SAP Teams.	Distillation of key strengths and weaknesses of existing SAPs from other programmes, discussion with those involved in their development to identify key lessons learned of the SAP development process. Preparation of a report on the above. A National SAP Team will be established in each country based on candidates proposed by the national coordinators, and agreed with the RCU Team Leader and international SAP TA. These teams should be technical in nature[21] and probably consist of around 5 people. In order not to duplicate existing structures, where possible members of these SAP teams will be drawn from the National Task Forces (NTFs) and will therefore act as a representative working sub-group of the NTFs.	International TA (1 mm) with experience of SAP preparation to review SAPs and prepare report. He/she will have ongoing inputs throughout the rest of the programme to facilitate and co-ordinate the preparation of the SAP National SAP teams agreed between National coordinators (NCs), RCU Team Leader and international SAP TA	2008 – year 1
2. Finalization of the TDA, and specification of a 'vision statement' of long-term EcoQOs	Finalization of TDA using consultant inputs and a verification workshop. This workshop will also be used to review of report output from Step 1, and consider priority issues identified from the TDA. Long-term EcoQCs will then be proposed/specified. A report will be produced laying out the long-term EcoQCs, with clear justification for their inclusion and specification.	International SAP TA (4 mm) to; (i) finalise TDA; (ii) prepare for, facilitate and report on a 2-3 day regional workshop attended by all the national SAP teams National SAP teams to attend regional workshop	2009 – year 2
3. Brainstorming of long-term EcoQOs, and agreement on a regional SAP team	National workshops will be held in each country to review the work of the national SAP teams and set/review the agenda for the SAP development. In order to get the most out of these workshops, the TDA and 'vision statement' will be sent to all participants and other relevant stakeholders in advance, with accompanying notes and requests for stakeholder feedback on key issues that will be required/incorporated at the workshops. These comments will be collated prior to the workshop. National workshops will discuss the EcoQOs proposed, and agree on final drafts. It will then examine each EcoQO and identify possible options for achieving them. Working groups during the workshop will each develop part of a matrix (or table) of options, which should include: (i) which part of the causal chain they address; (ii) timeframes for implementing them; (iii) responsible parties relative costs (where possible); and (iv) indicative priorities to the solutions proposed.	National workshop (2-3 days) facilitated and reported on by the international SAP TA (3 mm), and attended by the national SAP teams, the NTFs, national steering committees and co-ordinators and additional specialists or stakeholder representatives as appropriate Stakeholders to provide comment/feedback	2009 – year 2

[21] The composition of the team will depend on the nature of the potential solutions emerging from the brainstorming, but should include specialists in technical, legal, financial and public policy issues. The teams should include adequate stakeholder representation.

	A regional SAP team will be agreed and will include representatives of the National SAP Teams, to ensure the synergy needed to develop regional priorities. The regional SAP team and NCs will collate and review the results of the national workshops at a regional workshop and pull them together into a set of regional ECOQOs.	International SAP TA to agree regional SAP team representatives in association with NCs and NTFs at national brainstorming workshops Regional SAP team and NC to attend regional workshop, prepared for, facilitated and reported on by the international SAP TA (1/2 mm)	
4. Foster synergy/harmonization between the development of the SAP and other ongoing programme activities/components, and conduct feasibility study of options/actions	Review all the outputs and lessons learned from the various activities/studies under other programme components e.g. coastal management, lessons learned, regional fisheries assessments, policy, marine pollution etc. In light of this review, examine the options proposed by the brainstorming workshop, and re-examine the tentative priorities and revise them as necessary. Then select those higher priority solutions that require further study outside any other studies proposed separately under other programme components. These additional studies will be conducted between the two national workshops to be held in each country under this step. For each option/action the team should: (i) evaluate costs, (ii) list benefits, (iii) examine social soundness, and (iv) describe links to current policies. The Regional SAP Team will then conduct a preliminary environmental evaluation of whether or not the proposed options will make significant progress towards the long-term EcoQOs (see 'Set Operational Objectives' below). If the proposed measures do not signify significant progress towards the longer term objectives, the options considered will be re-examined at the national level and strengthened.	National SAP Teams (2 national workshops in each country, one at beginning and one at end of year, each lasting 2 days) International SAP TA (4mm) to attend, facilitate and write up all national SAP team workshops and assist with review of other programme outputs and lessons learned Unspecified technical studies completed by relevant technical experts Regional SAP Team workshop (2 days)	2010 – year 3
5. Political consultation on selected options	Political decisions will be taken about which mix of options/actions, including key reforms and investments, governments (and the private sector where appropriate) will commit themselves to in the short/medium term (5/10 years). Written output on agreement will be prepared and reflected in draft National SAPs.	International SAP TA (3 mm) to present key outputs from Step 4 above and conduct consultation with a) the programme Steering Committee (1 meeting), and b) the NTFs/NCs/scS (1 meeting in each of the 8 countries). International SAP TA to ensure written agreement on proposed options/actions at end of, or following all meetings/consultation National SAP teams to prepare draft national SAPs, with assistance from international SAP TA	2011 – year 4

6. Set operational objectives and measurable targets	The technical and political consultation process will enable the regional SAP team to determine how far the political process can, in the short/medium term, be taken towards the long-term EcoQOs. By careful calculation and balancing of the environmental and social benefits, a set of five to ten year operational objectives will be laid down, stating what measurable progress should be observable. Priority interventions will also be identified.	Regional SAP team (1 regional workshop of 2-3 days). Workshop planned, facilitated and reported on by the international SAP TA (1 mm)	2011 – year 4
7. Agree on an institutional framework	*Activities related to agreeing the institutional framework are covered under the institutional arrangements component of the programme, with outputs feeding into the SAP process*	*N/a*	*N/a*
8. Preparation of monitoring and evaluation indicators	Following outline proposals prepared by the international SAP TA, the Regional SAP team will prepare a set of process, stress reduction and environmental status indicators (including living/fisheries resources) at a workshop. The indicators will initially be based on the results of the TDA, but will be adapted according to the needs of the long-term EcoQOs and shorter-term operational objectives/targets, as well as project monitoring and evaluation indicators for any subsequent GEF interventions[22]. Each indicator will be clearly linked to the institutional capacity for monitoring it.	International SAP TA (1 mm) for preparation of draft monitoring and evaluation indicators, and preparation, facilitation and reporting on indicator workshop Regional SAP team (one 2-3 day workshop) to agree monitoring and evaluation indicators	2012 – year 5
9. Preparation of draft SAP	Review all the outputs and lessons learned from the various activities/studies under other programme components etc. Preparation of a draft SAP on the basis of the reforms and investments outlined in the draft National SAPs and the components agreed in the preceding negotiation process. The SAP will be a concise jargon-free document with clear targets, quantifiable time-limited milestones and unambiguous assignment of responsibilities. It will include: (i) a statement of the priority problems and principles adopted for solving them, (ii) long-term EcoQOs and operational objectives, (iii) joint planning and dispute settlement mechanisms, (iv) institutional arrangements, (v) public participation, and (vi) monitoring and review arrangements	International SAP TA (1 mm) to prepare draft SAP in outline prior to a 3-4 day regional workshop of the Regional SAP team, which will agree the SAP.	2012 – year 5
10. National endorsement of SAP	The regional draft SAP and appropriate national SAPs will need to be endorsed in each country. This will be conducted under the auspices of the NTFs, but will also include wide consultation with stakeholders and civil society. Appropriate mechanisms for public consultation will be agreed, with a related communications strategy and mechanisms to report stakeholder comment/endorsement.	NTFs, National SAP Teams, and RCU to organise national dissemination of draft regional and national SAPs for comment and endorsement	2012 – year 5

[22] The GEF IW M&E guide (GEF M&E Working Paper # 10) contains detailed information on the development of suitable indicators which will be used as a guide

	In the event of a major reservation on the SAP (unlikely if full consultations are maintained throughout its development), the Steering Committee should decide whether or not to amend the draft and submit it for additional consultations/endorsement.		
11. Develop GEF Interventions and conduct Partnership Conference	Future interventions planned on the basis of the draft SAP and discussed at a partnership conference, enabling bilateral and multilateral organizations to review the specific proposals requiring development assistance (including TA, loans and possible equity transfers) and to engage in joint planning for actions to address priority transboundary issues in potential future projects.	International SAP TA (1/2 mm) to prepare for, facilitate, and subsequently write up a partnership conference (2 days), to be attended by bilateral and multilateral organizations, and the regional SAP Team	2012 – year 5
12. Ministerial conference adopts SAP, and SAP published and disseminated	A high level Ministerial Conference will formalize national commitment to the regional SAP, generate suitable press coverage, and celebrate the conclusion of the policy process. It will also serve as a launch pad for a new GEF initiative	International SAP TA (1/2 mm) to assist with preparation and facilitation of conference, to be attended by Regional SAP team and relevant Ministers. RCU to organise press coverage/releases and publication and dissemination of the SAP	2011 – year 5

Table 2 SAP Formulation Monitoring Indicators

Step	Indicators
1. Review of other SAPs and establishment of national SAP teams.	Report on previous SAPs prepared List of national SAP team members
2. Finalization of the TDA, and specification of a 'vision statement' of long-term EcoQOs	Finalized TDA Regional workshop report, including vision statement on EcoQOs
3. Brainstorming of long-term EcoQOs, and agreement on regional SAP teams	8 National workshop reports and public comment Regional workshop report List of regional SAP team members
4. Foster synergy/harmonization between the development of the SAP and other ongoing programme activities/components, and conduct feasibility study of options/actions	16 national workshop reports Regional workshop report and environmental evaluation
5. Political consultation on selected options	Meeting minutes and written/signed agreement in all participating countries on agreed options Draft national SAPs
6. Set operational objectives and measurable targets	Regional workshop report on operational objectives and measurable targets
7. Agree on an institutional framework	N/a
8. Preparation of monitoring and evaluation indicators	International SAP TA report on draft monitoring and evaluation indicators Regional workshop report to include specification of monitoring and evaluation indicators
9. Preparation of draft SAP	Regional workshop report Draft SAP
10. National endorsement of SAP	Documented communication strategy Archives of public comment/endorsement
11. Develop GEF Interventions and conduct Partnership Conference	Conference report (including interest in outline future interventions) and attendance list
12. Ministerial conference adopts SAP, and SAP published and disseminated	Press releases Conference report Records of SAP publication and dissemination

Attachment 2: Selected BOBLME Project Activities Relevant to Reducing Vulnerability in Rural Coastal Communities to Natural Hazards

Factors contributing to increased vulnerability to natural hazards in rural coastal communities	Relevant activities designed to reduce vulnerability	Relevant BOBLME Component Activities
Lack of timely warning	2nd tier early warning system (EWS)	Inclusion in SAP (Subcomponent 1.4)
Absence of vulnerability mapping	Identify high risk areas prone to natural hazards	Development of vulnerability indicators (Subcomponent 2.1)
Poor land use zoning and planning	Increased local planning authority and capacity	Capacity building for local policy formulation (Subcomponent 2.2)
Destruction of natural habitats (buffer zones)		Post-tsunami coastal critical habitat assessment (Subcomponent 1.1) Creation/restoration of critical habitats (Subcomponent 3.2)
Poverty (constraining people to use dangerous but cheap habitats)	Poverty reduction through improved fisheries management and fish trade as well as provision of alternative employment opportunities	Collaborative fisheries management activities (Subcomponent 2.3) and alternative livelihood activities (Subcomponent 2.1)

Attachment 3. Selected Key Milestones between BOBLME Project Components and the SAP Formulation Process

Component/Activity					
Finalization of TDA Financial strategy Institutional arrangements SAP formulation	---------- ---------- ----------> National SAP teams formed Reviews of other SAPs EcoQOs initially identified	----------→ Regional SAP team formed Regional EcoQOs confirmed	 Review of the project outputs/lessons-learned EcoQOs modified based on project inputs	 → National SAPs prepared Policy workshops Review of the project outputs /lessons-learned	 Draft SAP prepared Partner conference Ministerial conference SAP finalized
ICM "stocktaking"	Data review Stakeholder consultation	ICM "lessons learned" and recommendations Data portal established	Policy workshops Technical workshops Capacity building	----------	---------- →
Collaborative regional fisheries assessments & management plans	Regional fisheries TF established Review of literature/national data bases	Stakeholder consultations Biological studies Initialization of harmonized data collection	----------→ ----------→ ----------→		Preparation of regional/subregional fishery management plans
Large-scale processes/dynamics of BOBLME		Inventory and collection of data sets	Data gaps identified Programme of studies prepared		
MPAs and conservation of fish stocks	Regional TF established	Inventories/status update Mapping Gap analysis	FSP developed		
Regional institutional collaboration	----------	----------	----------	----------	----------→
Environmental health indicators Regional coastal pollution monitoring & water quality criteria	National workshops Regional workshop National TFs formed	National indicators developed National workshops "Hotspots" identified Protocols established	Regional indicators developed	National data sharing ---- ---- ----------→	 ----------→ Regional monitoring strategy and action plan prepared
Project Year	1	2	3	4	5

ANNEX 5: PROJECT COSTS AND PROVISIONAL WORK PLAN

Project Cost by Component/Subcomponent

Component	Total (US $ '000)	% Total Base Costs
1. Strategic Action Programme (SAP)		
1. Finalization of TDA/TDA Preparation	1,228.2	4
2. BOBLME Institutional Arrangements	1,750.2	6
3. Sustainable Financing Strategy and Recommendations	1,114.2	4
4. SAP Formulation and Adoption	1,348.8	4
Subtotal: Strategic Action Programme (SAP)	5,441.5	18
2. Coastal/Marine Natural Resources Management and Sustainable Use		
1. Community-based Integrated Coastal Management ICM)	1,036.6	3
2. Improved Policy Harmonization and Institutional Strengthening	2,812.6	9
3. Collaborative Regional Fishery Assessments and Management Plans	10,051.1	32
4. Collaborative Critical Habitat Management	561.3	2
Subtotal: Coastal/Marine Natural Resources Management and Sustainable Use	14,461.5	47
3. Improved Understanding and Predictability of the BOBLME Environment		
1. Large-scale Processes and Dynamics	653.6	2
2. Marine Protected Areas and fish refugia	3,073.7	10
3. Regional Collaboration	702.0	2
4. Improved understanding and predictability of BOBLME: GIS	2,194.8	7
Subtotal: Improved Understanding and Predictability of the BOBLME Environment	6,624.1	21
4. Maintenance of Ecosystem Health and Management of Pollution		
1. Establishment of an effective Ecosystem Indicator Framework	570.3	2
2. Coastal Pollution Loading and Water Quality Criteria	769.5	2
Subtotal: Maintenance of Ecosystem Health and Management of Pollution	1,339.8	4
5. Project Management, Monitoring and Evaluation and Knowledge Management		
1. Establishment of the RCU	2,490.6	8
2. Monitoring and Evaluation System	431.0	1
3. Project Information Dissemination System	205.1	1
Subtotal: Project Management, Monitoring and Evaluation and Knowledge Management	3,126.7	10
Total BASELINE COSTS	27,741.0	100.0
Physical Contingencies	1,604.8	6
Price Contingencies	1,856.2	7
Total PROJECT COSTS	30,993.5	113

Summary Budget by Component and by Year

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5011															
5300	Salaries professional-budget														
5300	Programme Coordinator (60 months)	425,760	255,581	170,315	102,189	68,155	17,033	100	1,022,000	204,400	204,400	204,400	204,400	204,400	1,022,000
5300	Chief Technical Advisor (60 months)	228,201	231,278	178,869	228,201	60,881	15,457	100	927,430	185,486	185,486	185,486	185,486	185,486	927,430
5300	Finance and Budget Officer (3 months/year)					209,570	13,971	lumpsum	209,570	41,914	41,914	41,914	41,914	41,914	209,570
	Subtotal	653,961	486,859	349,184	330,390	338,606			2,159,000	431,800	431,800	431,800	431,800	431,800	2,159,000
5012															
5500	Salaries general service-budget														
5500	Salaries general service	0	0	0	0	0				0	0	0	0	0	**0**

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5011															
5300	Salaries professional-budget														
5300	Programme Coordinator (60 months)	425,760	255,581	170,315	102,189	68,155	17,033	100	1,022,000	204,400	204,400	204,400	204,400	204,400	1,022,000
5013															
5570	Consultants-budget														
	International Consultants														
5542	TDA preparation (12 wm)	172,200					20,500	70	172,200	57,400	57,400	57,400			172,200
	SAP Finalization (2 wm)	19,680					20,500	48	19,680		9,840	9,840			19,680
	Financial Strategy (19.5 wm)	390,000					20,000	100	390,000	79,592	55,714	143,265	63,673	47,755	390,000
	SAP Formulation (11 wm)	153,340					20,500	68	153,340	40,119	41,222	28,223	28,943	14,833	153,340

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5542	ICM (4.5 wm)		62,730				20,500	68	62,730	34,850	27,880				62,730
5542	Policy harmonization (9 wm)		88,560				20,500	48	88,560	9,840	19,680	19,680	19,680	19,680	88,560
5542	System designer (2 wm)		19,680				20,500	48	19,680	9,840		9,840			19,680
5542	System Programmer (3 wm)		29,520				20,500	48	29,520		29,520				29,520
5542	Applications Programmer (3 wm)		29,520				20,500	48	29,520		29,520				29,520
5542	Web-interface Programmer (3 wm)		29,520				20,500	48	29,520		29,520				29,520
5542	Fishery Assessment Sharks (7 wm)		68,880				20,500	48	68,880	9,840	39,360	9,840		9,840	68,880
5542	Fishery Assessment Mackerel (6 wm)		59,040				20,500	48	59,040	9,840	19,680	9,840	9,840	9,840	59,040
5542	Fishery Assessment Hilsa (14 wm)		137,760				20,500	48	137,760	68,880	39,360	9,840	9,840	9,840	137,760
5542	Fisheries Statistics (16 wm)		157,440				20,500	48	157,440	29,520	78,720	9,840	19,680	19,680	157,440
5542	Large Scale Processes and Dynamics (2 wm)			19,680			20,500	48	19,680		9,840		9,840		19,680

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5542	Marine Protected Areas and Fish Refugia (20 wm)			196,800			20,500	48	196,800	59,040	68,880	68,880			196,800
5542	GIS Consultants (6 wm)			44,400			20,000	37	44,400	14,800	14,800	14,800			44,400
5542	Environmental Indicators (2 wm)				19,680		20,500	48	19,680		9,840	9,840			19,680
5542	Resource advisor (3.9 wm)				38,376		20,500	48	38,376	24,600	1,968	7,872	1,968	1,968	38,376
	Law Advisors (1.5 wm)				14,760		20,500	48	14,760					14,760	14,760
5542	Midterm and final evaluation (2 missions)					90,000	45,000	100	90,000			40,000		50,000	90,000
5542	Design and launch website (40 days)	0	0	0	0	4,800	250	48	4,800	4,800	0	0	0	0	4,800
5570	Subtotal	735,220	682,650	260,880	72,816	94,800			1,846,366	452,961	582,745	449,000	163,464	198,196	1,846,366
	National Consultants														
5543	TDA preparation (24 wm)	120,000					5,000	100	120,000	40,000	40,000	40,000			120,000
5543	SAP Finalization (12 wm)	60,000					5,000	100	60,000		60,000				60,000
5543	Policy harmonization (16 wm)		80,000				5,000	100	80,000	40,000	40,000				80,000
5543	ICM (16 wm)		80,000				5,000	100	80,000	40,000	40,000				80,000
5543	Fishery Assessment: Sharks (24 wm)		120,000				5,000	100	120,000	80,000	40,000				120,000
5543	Fishery Assessment: Mackerel (10 wm)		24,500				5,000	49	24,500	24,500					24,500
5543	Fishery Assessment: Hilsa (8 wm)		40,000				5,000	100	40,000	40,000					40,000

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5543	Fisheries Statistics (16 wm)		39,200				5,000	49	39,200	39,200					39,200
5543	Large Scale Processes and Dynamics (8 wm)			19,600			5,000	49	19,600			19,600			19,600
5543	Marine Protected Areas and Fish Refugia (!00 wm)			245,000			5,000	49	245,000	49,000	98,000	98,000			245,000
5543	GIS National Consultants (28 wm)			61,740			4,500	49	61,740	17,640	17,640	17,640	4,410	4,410	61,740
5543	Environmental Indicators (8 wm)				19,600		5,000	49	19,600			19,600			19,600
5543	National Consultants Coastal Pollution Loading and Water Quality Criteria (22.6 wm)				55,370		5,000	49	55,370	18,214	2,436	29,849	2,436	2,436	55,370
5543	Finalization of M&E system (1 wm)					6,000	12,500	48	6,000	6,000					6,000
5543	Regional/National Expert Monitoring and Evaluation (30 wm)					72,000	3,000	80	72,000	14,400	14,400	14,400	14,400	14,400	72,000
5543	Regional/National Expert Information Dissemination (30 wm)					72,000	3,000	80	72,000	14,400	14,400	14,400	14,400	14,400	72,000
5570	Subtotal	180,000	383,700	326,340	74,970	150,000			1,115,010	423,354	366,876	253,489	35,646	35,646	1,115,010
5021															
5900	Travel-duty budget														
5661	Duty travel		1,862			62,181		49	64,043	12,809	12,809	12,809	12,809	12,809	64,043
	Duty travel	50,000	50,000	50,000	50,000			100	200,000	40,000	40,000	40,000	40,000	40,000	200,000
5900	Subtotal	50,000	51,862	50,000	50,000	62,181			264,043	52,809	52,809	52,809	52,809	52,809	264,043

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5014															
5650	Contracts budget														
5571	SAP-TDA studies (16)	568,900					lumpsums	57	568,900	68,900	200,000	200,000	100,000		568,900
5571	Policy Harmonization (8)		235,720				lumpsum	18	235,720		100,000	135,720			235,720
5571	Contracts ICM (14)		190,700				lumpsum	28	190,700		190,700				190,700
5571	Fishery assessments and management plans:Sharks (24)		399,840				lumpsum	12	399,840	79,968	79,968	79,968	79,968	79,968	399,840
	Fishery assessments and management plans:Mackerel (24)		410,700				lumpsum	74	410,700	60,700	100,000	150,000	100,000		410,700
	Fishery assessments and management plans:Hilsa (24)		373,100				lumpsum	98	373,100	50,000	100,000	123,100	100,000		373,100
5571	Fisheries statistics(8)		668,100				lumpsum	73	668,100	100,000	300,000	200,000	68,100		668,100
5571	Large Scale Processes and Dynamics(8)			102,808			lumpsum	71	102,808		52,000	50,808			102,808
5571	Marine Protected Areas and Fish Refugia (8)			251,340			lumpsum	33	251,340		125,670	125,670			251,340
5571	Environmental Indicators (BOBLME Environment) (8)			122,120			21,500	71	122,120		61,060	61,060			122,120
5571	Mapping study (1)			142,000			200,000	71	142,000		142,000				142,000
5571	Monitoring Programme Design (1)			35,500			50,000	71	35,500		35,500				35,500

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5571	Thematic studies (8)			113,600			20,000	71	113,600	22,720	90,880				113,600
5571	GIS Data Base Inventory (8)			32,000			10,000	40	32,000		32,000				32,000
5571	Data Model Design and Implementation (3)			9,000			7,500	40	9,000		3,000	3,000	3,000		9,000
5571	Satellite Image Analysis			9,000			7,500	40	9,000		3,000	3,000	3,000		9,000
5571	Public awareness (8)			11,760			3,000	49	11,760		5,880	5,880			11,760
5571	BOBLME-Ecosystem Environmental indicators (8)				73,840		13,000	71	73,840			73,840			73,840
5571	Coastal pollution Loading and Water Quality Criteria(7)				168,980		34,000	71	168,980	33,796	33,796	33,796	33,796	33,796	168,980
5571	Coastal Pollution Loading and Water Quality Criteria (GIS) (2)			30,600			34,000	45	30,600	30,600					30,600
5650	Subtotal	568,900	2,278,160	859,728	242,820	0			3,949,608	446,684	1,655,454	1,245,842	487,864	113,764	3,949,608
5023															
5920	Training budget														
	Fellowships														

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
5905	*Group training*														
5905	SAP-TDA: Regional workshops (7)	174,940						14	174,940	24,991	49,983	49,983	24,991	24,991	174,940
5905	Improved policy harmonization Workshops (3)		36,210				17,000	71	36,210	12,070	12,070	12,070			36,210
5905	Stakeholder consultations: Sharks (30)		119,000				34,000	70	119,000	23,800	23,800	23,800	23,800	23,800	119,000
5905	Fishery assessment Regional TF Fish Group Meetings (5)		119,000				34,000	70	119,000	23,800	23,800	23,800	23,800	23,800	119,000
5905	Stakeholder consultations: Mackerel (60)		214,200				5,100	70	214,200		85,680	42,840	42,840	42,840	214,200
5905	Regional training Protected areas and Fish Refugia (6)			99,420			27,000	61	99,420		33,140	33,140	33,140		99,420
5905	Regional Training Environmental Indicators (10)				122,120		172,000	71	122,120		61,060	61,060			122,120
5905	Regional TOT (1)		15,300				34,000	45	15,300	15,300					15,300
5905	Regional training Improved Understanding and Predictability of the BOBLME Environment (8)	0	0	147,700	0	0	18,640	7	147,700	36,930	55,380	36,930	18,460	0	147,700
	Subtotal	174,940	503,710	247,120	122,120	0			1,047,890	136,891	344,913	283,623	167,031	115,431	1,047,890

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
	Meetings/Conference costs														
5905	Inception workshop (1)	15,000	15,000	15,000	15,000		60,000	100	60,000	60,000					60,000
5905	Regional meeting Institutional Arrangements (2)	68,000					34,000	100	68,000			34,000		34,000	68,000
5905	Regional Policy harmonization meeting (1)	34,000					47,900	71	34,000			34,000			34,000
5905	Establishment of RCU - staff training (6)	0	0	0	0	1,350	500	45	1,350	1,350	0	0	0	0	1,350
	Subtotal	117,000	15,000	15,000	15,000	1,350			163,350	61,350	0	68,000	0	34,000	163,350
5024	EXPENDABLE PROCUREMENT														
6000	Expendable procurement budget														
5925															
5933															
6005															
5025	NON-EXPENDABLE PROCUREMENT														
6100	Non-expendable procurement budget														
6004	Computers/ peripherals (8)		61,466				15,680	49	61,466		47,003	14,463			61,466
6003	GIS software, hardware, Satellite imagery, Internet Map Server			20,580				49	20,580		20,580				20,580

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
6004	Desktop computers (8)					7,840	2,000	49	7,840		7,840				7,840
6004	Laptop computers (3)					3,675	2,500	49	3,675	3,675					3,675
6011	Vehicle (saloon) 1					7,350	15,000	49	7,350		7,350				7,350
6012	Office equipment	0	0	0	0	14,477		49	14,477	0	14,477	0	0	0	14,477
	Subtotal	0	61,466	20,580	0	33,342			115,388	3,675	97,250	14,463	0	0	115,388
5027	TECHNICAL SUPPORT SERVICES														
6,150	Technical suppport services budget														
	TSS	0	0	0	0	0				0	0	0	0	0	0
5028	GENERAL OPERATING EXPENSES														
6300	GOE budget														
6152	Extension materials (3 times)	5,500	11,000		8,800		15,333	55	25,300		2,200	13,200	7,700	2,200	25,300
6190	Publications and communications (23)	34,875	33,575				5,411	55	68,450		10,150	20,150	20,150	18,000	68,450
6152	Maintenance Data base (1)		6,750				15,000	45	6,750		6,750				6,750
6152	Media Campaigns (8)		220,000				50,000	55	220,000		220,000				220,000
6152	Membership Fees (5)		35,500				10,000	71	35,500	7,100	7,100	7,100	7,100	7,100	35,500

		Expenditures by Component								Expenditures by year					
Oracle Code	Description (ORACLE)	Comp 1 SAP	Comp 2 Natural Resources	Comp 3 BOBLME Env	Comp 4 Ecosystem	Comp 5 Project Management, Monitoring and Evaluation and Knowledge Management	Unit Price $	% GEF Share	Total GEF	2008	2009	2010	2011	2012	Total
6152	Subscription Costs (50)		17,750				500	71	17,750	3,550	3,550	3,550	3,550	3,550	17,750
6176	General Operating Costs	40,000	40,000	40,000	40,000	125,000		80	285,000	57,000	57,000	57,000	57,000	57,000	285,000
6152	Miscellaneous	79,900	153,500	67,200	25,700	25,600		75	351,900	63,300	121,000	90,000	44,000	33,600	351,900
6152	Miscellaneous 1)	92,940	175,300	78,710	34,600	29,245		100	410,795	75,400	139,350	105,250	52,050	38,745	410,795
	Subtotal	253,215	693,375	185,910	109,100	179,845			1,421,445	206,350	567,100	296,250	191,550	160,195	1,421,445
	SUBTOTAL COMP 1	2,733,236							2,733,236						
	SUBTOTAL COMP 2		5,156,782						5,156,782						
	SUBTOTAL COMP 3			2,314,742					2,314,742						
	SUBTOTAL COMP 4				1,017,216				1,017,216						
	SUBTOTAL COMP 5					860,124			860,124						
	TOTAL	2,733,236	5,156,782	2,314,742	1,017,216	860,124			12,082,100						
5029	SUPPORT COSTS														
6130	Support costs budget	0	0	0	0	0									
	TOTAL	2,733,236	5,156,782	2,314,742	1,017,216	860,124			12,082,100	**2,215,873**	**4,098,946**	**3,095,276**	**1,530,164**	**1,141,841**	12,082,100

1) This Miscellaneous item is related to Contingencies (comprise physical and price contingencies)

Provisional Work Plan

	Year 1				Year 2				Year 3				Year 4				Year 5			
Component 1: Strategic Action Programme: **Preparation of a Strategic Action Programme (SAP) whose implementation will ensure the long-term institutional and financial sustainability of the BOBLME Programme.**																				
Subcomponent 1.1 TDA Preparation: Build on the BOBLME's existing draft Framework Transboundary Diagnostic Analysis (FTDA) and complete the Programme's TDA.																				
– Finalize the existing draft FTDA (currently being reviewed by BOBLME countries)	●	●																		
– Address critical data gaps identified by the FTDA			●	●																
– Update post-tsunami assessment of affected critical coastal/marine habitats, recommendations on programme supported activities	●	●	●	●	●	●														
– Prepare a draft TDA					●	●	●	●	●											
– Public consultations											●	●	●	●	●					
– Finalization of the TDA																●	●			
– Government adoption of the TDA																		●	●	●
– Preparation of the full-size project document for the second phase													●	●	●	●	●	●	●	●
Subcomponent 1.2 BOBLME Institutional Arrangements: Identify and establish agreed to permanent institutional arrangements ensuring the long-term management of the BOBLME.																				
– Comprehensive national and regional institutional analyses	●	●	●	●	●	●														
– Consultative workshops					●	●	●			●	●	●								
– Regional meeting(s)								●						●						
– Interim Regional Fisheries management task force established									●	●										
– Inter-ministerial conference to agree to institutional arrangements to manage the BOBLME Programme																	●			
Subcomponent 1.3 Financial Sustainability: Identify a possible financing mechanism(s) to fund BOBLME management structure and assist BOBLME countries to mobilize financial resources/mechanisms to implement SAP																				
– Establish an ongoing dialogue and relationship with potential partners and stakeholders,			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
– Establish appropriate regional and national institutional mechanisms to generate and administer programme-related funds	●	●	●																	

	Year 1				Year 2				Year 3				Year 4				Year 5			
– Testing of activity-specific financing mechanisms designed to cover their respective recurrent costs.						●	●	●			●	●	●			●	●	●	●	●
– Evaluation and Feedback Reporting on financing mechanisms									●					●				●		
<u>Subcomponent 1.4 SAP Preparation:</u> Process for formulation of an agreed Strategic Action Programme (SAP).																				
– Establishment of national (and a regional) SAP teams		●	●			●														
– Review of previous experiences associated with SAPs			●	●	●															
– Reaching consensus on ecological quality objectives (EcoQOs)						●	●													
– Political consultations								●	●	●					●	●	●			
– Preparation of national SAPs											●	●	●							
– Preparation of the draft regional SAP												●	●	●	●	●				
– Regional consultations (SAP & TDA)											●					●	●			
– Finalization of the SAP																		●		
– National endorsements & Adoption of BOBLME governments																		●	●	●
– Publication and dissemination																				●
<u>Component 2: Coastal/Marine Natural Resources Management and Sustainable Use:</u> Development and implementation of regional and sub-regional collaborative approaches to common/shared issues affecting the health and status of BOBLME.																				
<u>Subcomponent 2.1: Community-based Integrated Coastal Management (regional)</u>: Stock-taking/lesson learning of information and experience for promotion of community-based, fisheries and habitat management; co-management; and alternative livelihoods among fisher communities. in the region.																				
– Literature review and synthesis of findings	●	●																		
– Identification of pilot area(s)	●	●	●																	
– Stakeholder consultations through focus group encounters and facilitated workshops			●	●		●	●							●	●					
– Site visits and development of pre-selected case studies on alternative livelihoods, community management, co-management				●	●	●	●	●	●	●										
– Completion of the analysis of community-based ICM projects and activities in BOBLME region and policy reforms identified								●	●	●	●	●	●	●						
– Specific policy recommendations initiated at national level and incorporation into SAP											●	●	●	●	●	●				
<u>Subcomponent 2.2: Improved Policy Harmonization (regional):</u> Better understanding of the policy processes and enhanced capacity in the formulation of policy, regional exchange of information on policy and legislation (inputs to SAP).																				
– Policy studies	●	●	●																	
– National technical workshops			●	●						●	●									

	Year 1				Year 2				Year 3				Year 4				Year 5			
– Regional policy meeting(s)					●				●											
– Creation of a normative policy and legal documents portal						●	●	●	●											
– Strengthening of capacity in local formulation of policies supportive of sustainable community-based integrated coastal management									●	●	●	●	●	●	●	●	●	●	●	●
<u>Subcomponent 2.3: Collaborative Regional Fishery Assessments and Management Plans:</u> Development of regional and sub-regional management plans and harmonization of data collection and standardization to promote collaborative fisheries management approaches																				
– Development of a regional fishery management plan for sharks (regional)		●	●	●	●	●	●	●	●	●	●	●				●	●	●		
– Development of sub-regional fishery management plan for Indian mackerel (Bangladesh, India, Indonesia, Malaysia, Myanmar & Thailand)		●	●	●	●	●	●	●	●	●	●	●				●	●	●		
– Development of sub-regional fishery management plan for Hilsa (Bangladesh, India, and Myanmar)		●	●	●	●	●	●	●	●	●	●	●				●	●	●		
– Regional statistical working group established				●	●															
– Design and implementation of a common fishery data/information system in the BOBLME					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<u>Component 3: Improved Understanding and Predictability of the BOBLME Environment :</u> **Share information with other regional and global environmental monitoring programmes for improved understanding of the BOBLME ecological functions and processes**																				
<u>Subcomponent 3.1 Improved Understanding of Large-scale Processes and Dynamics affecting the BOBLME</u> : Improved understanding of large-scale oceanographic and ecological processes controlling BOBLME living resources.																				
– Inventory and collection of relevant data sets that measure past variability in the BOBLME and links to system productivity	●	●	●	●																
– Completion of 8 national retrospective studies	●	●	●	●																
– Regional workshops to identify and assemble datasets, identify data gaps, and plan relevant studies					●	●					●				●					
<u>Subcomponent 3.2 Marine Protected Areas in the Conservation of Regional Fish Stocks:</u> Consensus on approaches to the establishment and management of marine protected areas and fish refugia for sustainable fish management and biodiversity conservation objectives.																				
– Establishment of a working group of regional experts in MPAs/fish refugia		●																		
– Review and updating of MPA/fish refugia classification criteria;			●	●	●															
– Inventory and updating of status of existing MPAs/fish refugia in the BOBLME			●	●	●															

	Year 1				Year 2				Year 3				Year 4				Year 5			
– Gap analysis to assess effectiveness of existing system of MPAs in conserving biodiversity and providing critical habitat for priority transboundary fish stocks			●	●	●															
– Establishment of common regional data requirements and protocols to promote national efforts to establish MPAs/fish refugia					●	●	●	●												
– MPA managers network meeting							●													
– Mapping existing and potential MPA/fish refugia sites with GIS technology				●	●	●	●	●	●	●										
– Development of a regional action plan to strengthen existing & create new priority MPAs/fish refugia under a separate FSP									●	●	●	●								
– Training and capacity building			●	●			●				●			●				●		
– Awareness and outreach activities								●	●	●	●	●	●	●	●					
– Supporting studies				●	●	●	●	●	●	●										
– Preparation of a full sized project proposal for management of existing and creation of new MPAs					●	●	●	●	●	●	●	●								
<u>Subcomponent 3.3 Improved Regional Collaboration:</u> Establishment of effective partnerships with other regional and global environmental assessment and monitoring programmes.																				
– Develop joint activities or contribute to: GIWA transboundary region # 55, GPA in South Asian Seas; UNEP East & South Asian Seas Programmes; SACEP; Global Coral Reef Monitoring Network			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
– Develop coastal module activities (e.g., sustainable fisheries and marine biodiversity) associated with the Indian Ocean Global Ocean Observing System (IOGOOS)					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
– Coordination with relevant GEF-supported regional initiatives and global (e.g., IW:LEARN) projects			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
<u>Component 4: Maintenance of Ecosystem Health and Management of Pollution:</u> **Development of agreed set of environmental indicators to measure the health of the BOBLME regional collaborative approach to identifying/ remediating important coastal water pollution issues.**																				
<u>Subcomponent 4.1 Establishment of an Agreed to Ecosystem Indicator Framework :</u> Agreed ecosystem indicator framework designed to measure progress toward sustaining BOBLME health.																				
– National task force for ecosystem health established - responsible for developing indicators.			●																	

	Year 1				Year 2				Year 3				Year 4				Year 5			
– National workshops to identify existing indicators of environmental health used in BOBLME countries, development of indicators and accompanying quantitative objectives				●	●	●														
– Regional workshop to reach consensus of system-wide indicators, thresholds and targets, and timelines for achieving objectives							●	●			●	●								
<u>Subcomponent 4.2 Coastal Pollution Loading and Water Quality Criteria:</u> Development of a regional collaborative approach to identifying important coastal water pollution issues and to develop remedial strategies																				
– Meetings/think Tanks to develop a coastal water quality monitoring mechanism for the region, develop approaches to addressing identified pollution hotspots, provide background documentation to support a regional mechanism for managing pollution					●	●	●			●		●		●		●		●		
– Address identified capacity needs for monitoring and managing water quality and disseminating information;							●	●	●											
– Develop a systematic coastal water quality programme capable of identifying pollution "hotspots" in relation to agreed criteria;									●	●	●	●	●	●	●	●	●	●	●	●
– Annual technical meetings to discuss results obtained and their implications, Provide support for problems encountered and share lessons learned. Proposed corrective strategies and timeframes for reducing pollution loads to acceptable levels			●				●				●				●				●	
– Increase awareness among decision makers and the public of pollution problems in the BOBLME & impacts on the regions shared ecosystem and resources.									●	●	●	●	●	●	●	●	●	●	●	●
<u>Component 5: Project Management:</u> **Establishment and of cost-efficient management, of project operations, M&E, and information dissemination capacity**																				
<u>Subcomponent 5.1 Establishment of the RCU :</u> Establish a regional coordinating unit (RCU) for coordination of BOBLME supported activities leading to the finalization of the Strategic Action Programme.																				
– Recruitment of international and national staff	●																			
– Purchase of necessary equipment	●	●																		
– Completion of arrangements with the host-government to support the RCU office,		●	●	●																
– Relocation to RCU office				●																

	Year 1				Year 2				Year 3				Year 4				Year 5			
Subcomponent 5.2 Monitoring and Evaluation System: Establish a cost-effective monitoring and evaluation system in conformity with existing FAO and World Bank policies and procedures.																				
– Inception planning meeting, workplan, M&E needs, reporting		●																		
– Software developed to support computer-based M&E programme;		●	●																	
– Provision of training to national coordinators & outside regional contractors for accurate data collection, & reporting to the RCU			●	●																
– Quarterly & Semi-annual reporting		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
– Project steering committee meeting / annual review meeting				●				●				●				●				●
– Mid-term evaluation.										●	●									
– Final project evaluation																			●	
Subcomponent 5.3 Project Information Dissemination System: Disseminate information to regional and global stakeholders relevant to the BOBLME and the BOBLME Programme																				
– Contract the monitoring and information		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
– Establish a dedicated website,		●																		
– Press releases, development of promotional materials, and design and dissemination of country-specific audio-visual materials.			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
– Coordinate with the IW:LEARN Project, on approaches and learning			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ANNEX 6: IMPLEMENTATION ARRANGEMENTS

(including draft TORs for international and national personnel)

Partnership Arrangements

BOBLME National Governments

The long-term success of the BOBLME Programme will ultimately depend on the shared vision, approach and commitment of the BOB countries to the programme's existence. Participating governments can mobilize the global community to participate through strategic partnerships, primarily in the form of provision of support for activities which in turn will lead to the creation of the necessary enabling environment to achieve the aforementioned commitment over the long-term. National governments have demonstrated their substantial commitment to the first phase project, through provision of significant levels of support in both cash and in-kind contributions. Cash contributions will be equivalent for all countries and be used to cover the costs of: (i) a contracted full-time national technical advisor, (ii) the *pro rata* portion of the salary of the national coordinator, (iii) associated office space and utilities, and (iv) in-country costs associated with sponsoring project-related national workshops and the participation of national representatives. In addition, BOBLME governments will provide substantial in-kind contributions which will cover: (i) all counterpart salaries for workshops and training and local travel and (ii) the time of National Task Force members. Finally, once agreement is reached among BOB participating governments in project year (PY) 1 on the designation of the programme's host country, it is expected that the latter will support much of the Regional Coordination Unit's (RCU) operating costs. Support will consist of provision of appropriate office space, related office operational costs and utilities including tele-communications and the contracting of three support staff (secretary, driver, and cleaner). It is understood, this commitment may be adjusted once the BOBLME institutional arrangements have been finalized.

GEF

The GEF's added value is to provide incentives and financial support for national and local institutions to address priority transboundary environmental problems in the BOBLME. The project's regional approach, with GEF support, will make financial resources available to recipient countries, to meet the "incremental costs" to address transboundary issues. GEF funds will assist in providing linkages and harmonizing national and local actions with regional environmental objectives.

FAO

FAO is the leading international organization in the area of sustainable fisheries management and development. As the executing agency of the BOBLME Programme, FAO will draw on its wide range of in-house expertise in the area of marine and coastal resources management and on 25 years of experience in the Bay of Bengal region, to support the proposed project. An interdivisional Project Task Force (PTF) will be established and consist of experts in the areas of marine resources assessment and management, fisheries policy and planning, fisheries statistics and information, legal expertise on institutional issues and on the sustainable management of transboundary fish stocks, among others. The project will also benefit from FAO's extensive work on conservation and management of fisheries resources within the ecosystem context, with major emphasis on the implementation of the FAO Code

of Conduct for Responsible Fisheries and associated International Plans of Action, at global and regional levels. It is understood that this expertise will be used largely for technical backstopping and that national/regional expertise will be used in implementing the project wherever possible.

In addition to the technical support, FAO will provide administrative and operational support to the project, drawing on its network of decentralized country offices and field operations and technical staff in the Regional Office for Asia and the Pacific.

World Bank

The World Bank will bring its extensive international experience and knowledge on coastal and marine issues and assist client countries to benefit from experiences and lessons of similar projects around the world. It will provide policy support and the sharing of "lessons-learned." In the implementation of the national, sub-regional and regional projects, the Bank, through its country offices will provide assistance for specific investment opportunities at country level that may evolve during the implementation of the BOBLME. Like FAO, the World Bank will serve as an ex-officio member of the Project Steering Committee and in National Task Force meetings in countries where there are WB representations

Co-Financiers

Co-financing agencies are an essential partner to the BOBLME Programme. GEF resources are only catalytic in nature and additional sources of financing and expertise are essential to achieving the identified project objectives and programme goal over the longer term. This is particularly relevant in an area as large and complex as the BOB. Confirmed sources of direct cash finance are Norway (US$1.2 M) and Sida (US$1.3 M (cash); US$9.5 M (other). Confirmed sources of direct in-kind finance are BOBLME countries (US$5.7 M), FAO (US$0.8 M) and NOAA (US$0.4 M).

Structure for Project Management and Coordination

Due to its multi-country scope, the BOBLME project encompasses both regional and national components, and encompasses a wide range of technical fields, including fisheries and other living marine resources, critical habitats, pollution and socio-economic issues, all of which will require technically competent oversight. Furthermore, as a preparatory project focused upon building trust and cooperation between participating countries, setting priorities and identifying strategic management options for the Bay of Bengal, the project requires a considerable emphasis to be placed on inter-country coordination, communications and information dissemination.

The management structure presented in this annex and in the accompanying organogram fulfils not only an administrative and coordination function but also provides the basis for a range of other technical tasks not specific to individual activities. These include monitoring and information dissemination functions, as well as supervision of regional and national activities.

Project Steering Committee (PSC)

The PSC will be the policy setting body for the project and will also have the responsibility for endorsing the Annual Regional Work Plan (ARWP), which will contain details of the previous years' technical activities and the plan for the next year. Composition will include two members nominated by each BOBLME member country; typically one will be drawn from the Ministry of Fisheries and the second from the Ministry of the Environment. In addition, representatives of FAO, the World Bank and co-financing agencies will be *ex officio* members. The Regional Coordinator will act as secretary. The chairperson of the PSC will change annually (with no country repeating) and the country of the current chairperson will normally be the host country for the annual PSC meeting. The chairperson will retain contact with RCU during the year and agree upon the site and agenda for the next meeting.

Once endorsed by the PSC, the ARWP will be submitted to FAO under signature of the Chairperson of the PSC. The PSC will also consider and provide comments on external evaluations and audits. The PSC will normally meet once a year, although exceptional meetings (e.g. during the first year of start-up, if required) could be called. Draft TORs for the PSC are appended (Attachment 1a).

Regional Coordination Unit (RCU)

The RCU will act as Secretariat to the PSC. It will coordinate work at the national level through the National Coordinators (NC) and at regional level through regional sub-contracting agencies or individuals.

Following the approval of the BOBLME project in the February 2005 Inter-sessional Work Programme, the location of the project was reopened for consideration. In order to give the countries time to discuss the implications and potential host country commitments, a temporary arrangement was agreed by the BOBLME countries at the Appraisal Workshop that was held in Bangkok in June 2007. The countries agreed that the FAO Regional Office for Asia and the Pacific, Bangkok (RAP) host the Regional Coordination Unit (RCU) for one year. This would allow the interested countries to prepare proposals for hosting the project and give time for the BOBLME countries to agree during PY1 upon the location of the RCU for the first phase project.

The RCU will be composed of three international staff, recruited from the region as far as possible, comprising a Regional Coordinator, a Chief Technical Advisor, a Finance and Budget Officer, and a regionally/nationally recruited Monitoring and Information Specialist. Three nationally recruited staff will provide the needed office management, financial management and IT skills. Support staff (secretary, driver, cleaner) and additional services not requiring a full-time staff member (e.g. legal, IT systems maintenance, and specific technical skills areas) will be contracted as required.

The primary responsibility of the RCU will be to ensure the effective development of the Transboundary Diagnostic Analysis (TDA) and the Strategic Action Programme (SAP) as called for under the project document. This will be achieved by preparing and coordinating the implementation of an ARWP, which will draw upon Annual National Work Plans (ANWP) from each member state, as well as the programming of regional activities. The RCU will also develop and implement a monitoring programme, a communications programme and obtain independent scientific reviews of all significant technical matters

(proposals or analyses). Reports on these activities, and financial results, will form part of the work plan submitted to the PSC. Draft TORs for the RCU are appended (Attachment 1b). Draft TORs for the Regional Coordinator, Chief Technical Advisor and Monitoring and Information Specialist are appended in Attachments 1c – 1e, respectively.

National Task Forces and Coordinators

The National Task Force (NTF) will guide the implementation of the project at national level. Its role will be analogous to that of the PSC, but at national level. Members of the NTF will be nominated by participating Ministries but will also include representatives from non-governmental, civil society and private sector organizations. The NTF will consider and endorse the ANWP for submission to the RCU, including specifications for work within the country over the next year, and support the timely undertaking of the work plan through activities of the National Coordinator, consultants and the National Scientific Advisory Panel (NSAP).

The National Coordinator will act as both Chairperson and Secretary to the NTF and will be responsible for preparing agenda and documents required for NTF meetings, as well as directly supervising implementation activities within the country. He/she will be nominated by the lead Ministry for that country, and technically approved by FAO and will be supported by a secretary. The National Coordinator will be assisted by a fulltime National Technical Adviser. Draft TORs for the NTF, National Coordinator and National Technical Advisor are appended (Attachment 1f, 1g and 1h, respectively).

Representatives from the FAO and World Bank country offices if present will serve on the multi-sectoral National Task Forces, in *ex-officio* capacity, which will provide opportunities for ensuring the project results feed into country dialogue and future investments.

Scientific Advisory Panels

Scientific Advisory Panels are proposed at both regional and national levels. Each will consist of a roster of technical specialists, acknowledged as experts at their respective levels (regionally or nationally) who will be paid on an ‘as required’ basis, but with CVs and rates previously approved under professional service procurement arrangements. The roster will comprise at least two specialists for each of the main areas of focus for the project (i.e. fisheries/living marine resources, pollution, critical habitats and socioeconomic/ livelihoods). Review of subject specific proposals/analyses will be by two or three related technical specialists. Review of technically broader documents will be by one specialist from each relevant field. Panel members will work independently, as under a peer review mechanism, and will not normally meet.

The Regional Scientific Advisory Panel will provide input to the policy guidance and work plan approval tasks of the Steering Committee, through the RCU. Their reviews will normally be attached to any technical document presented to the Project Steering Committee.

National Scientific Advisory Panels will provide similar reviews of national technical proposals or documents. Draft TORs for the RSAP and NSAP are appended (Attachment 1i and 1j).

Annual Regional Work Plans

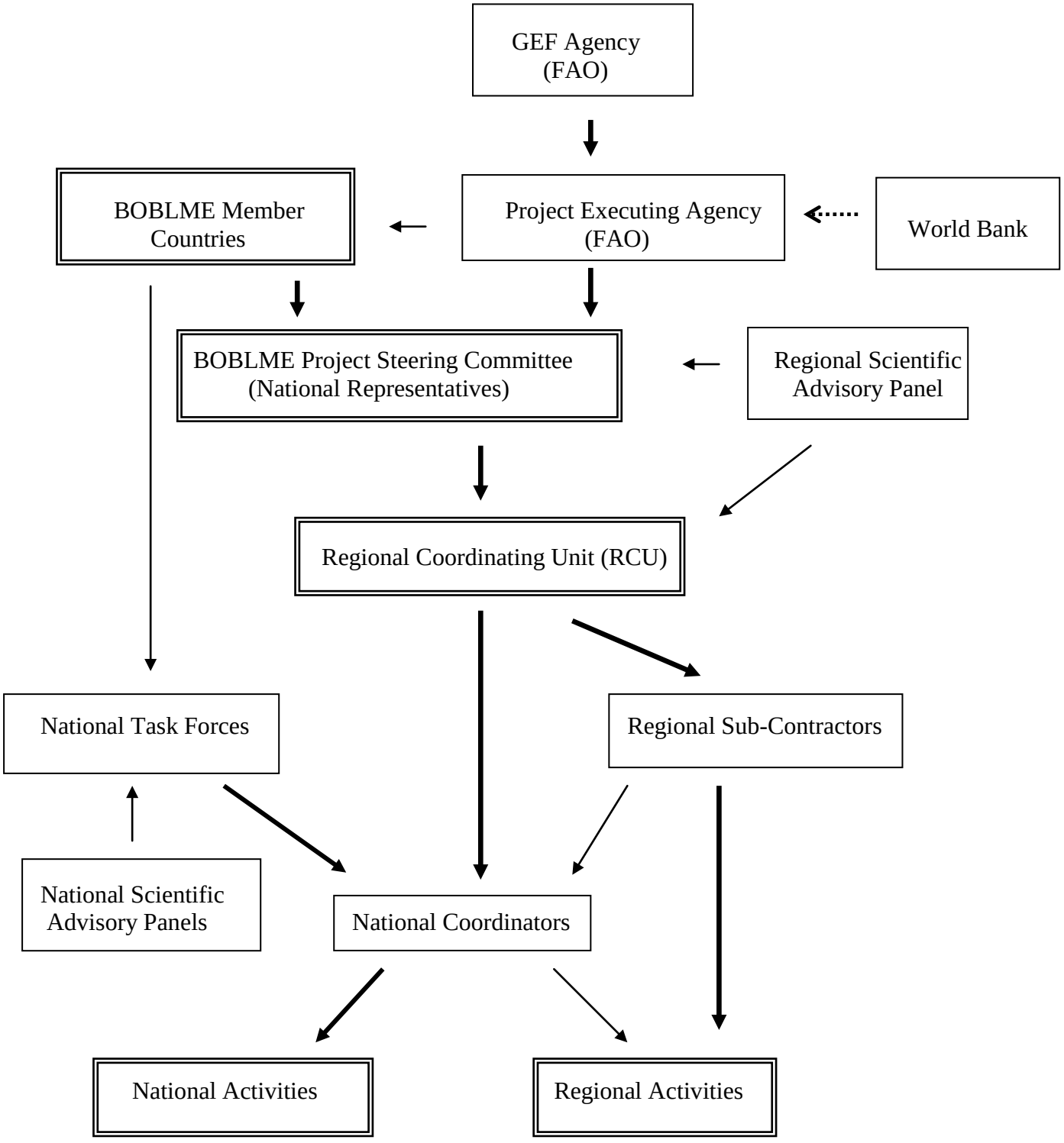
The ARWP is the central mechanism for guiding the work of the project and ensuring compliance of project activities with the overall Project Brief. It will be prepared by the RCU and submitted to the PSC for their endorsement within 45 days of the commencement of each calendar year and will be derived from ANWP proposals for each country as well as projected regional activities. ARWPs will provide a review of the previous year's activities (national and regional) and proposed plans for coming year. They will include a discussion of technical activities, a provisional financial report (including expenditure projections and disbursement plans), and reports on communications/dissemination, monitoring and IT.

IT Systems

IT systems for the project will be the responsibility of the regionally/nationally recruited Monitoring and Information Specialist with one nationally-recruited assistant. An office intranet will be established with a server to provide for common files and periodic tape back-up for the estimated eight users. Where feasible, National Coordinators will be enabled to upload and download data and other files through a web-based system. The printer and scanner will also be networked. IT systems maintenance (including ensuring updated security patches and data back-up) will be handled by a locally contracted IT company. The project website will be designed externally at the commencement of the project but will be maintained and updated by internal staff.

BAY OF BENGAL – LARGE MARINE ECOSYSTEM PROJECT

PROPOSED MANAGEMENT STRUCTURE



Attachment 1a: PROJECT STEERING COMMITTEE (PSC)

Draft Terms of Reference

Role: The Project Steering Committee (PSC) will be responsible for providing general oversight of the execution of the Bay of Bengal Large Marine Ecosystems Project and will ensure that all inputs and processes required for the development of the Transboundary Diagnostic Analysis (TDA), the Strategic Action Programme (SAP) and any additional activities agreed upon under the GEF project document are adequately prepared and carried out. In particular, it will:

- Provide overall guidance to the Regional Coordination Unit in the execution of the project.
- Ensure all project outputs are in accordance with the BOBLME Project Brief.
- Review, amend if appropriate, and approve the draft Annual Regional Work Plan of the project for submission to FAO.
- Facilitate the "mainstreaming" of relevant project findings and recommendations into national policy.

Membership: The PSC shall comprise two high level national representatives nominated by each participating member country (Maldives, Sri Lanka, India, Bangladesh, Myanmar, Thailand, Malaysia and Indonesia). Normally one national representative will be nominated from the Ministry of Fisheries or other national agency responsible for living marine resources, while the second representative will be from the Ministry of Environment or other national agency responsible for coastal and marine environmental issues. A senior official from FAO shall also be represented on the PSC, in *ex-officio* capacity. Other institutions active in the region such as WB, UNDP, UNEP, the South Asian Cooperative Environment Programme (SACEP), the International Maritime Organization (IMO) and co-financiers may also be requested to participate as observers. Experts selected for the Regional or National Scientific Advisory Panels will be ineligible for membership in the PSC. The Regional Coordinator will be an *ex-officio* member and Secretary of the PSC. Members of the PSC or their designated representatives are expected to participate on National Task Forces for their country of residence.

Meetings: Project Steering Committee meetings will normally be held annually, but the Chairperson will have the discretion to call an additional meeting, if this is considered necessary (e.g. during the first year of execution, or for significant modifications to the approved Annual Regional Work Plan[1]). No more than 13 months may elapse between PSC meetings.

Chairperson: A Chairperson for PY1 will be nominated by PSC members at their first meeting from among the national representatives on the PSC by a simple vote. The Chairperson will serve for one year, finishing his/her term upon the completion of the PSC meeting held closest to one year after selection. At this point a successor Chairperson shall be chosen by the PSC voting members in a similar manner. The position of Chairperson is not renewable and the new Chairperson shall not be of the same nationality as the outgoing Chairperson. In liaison with the PSC Secretariat, the Chairperson shall be responsible for determining the date, site and agenda of the PSC meeting(s) during his/her period of tenure, as

[1] Interim sessions of the PSC would not necessarily require a physical meeting, and could be undertaken by e-mail or other electronic format.

well as the chairing of such meetings. He/she will ensure circulation by the Secretariat to PSC members of all relevant documents, and will sign approved Annual Regional Work Plans and any subsequent proposed amendments submitted to the GEF Executing Agency (FAO).

Secretariat: The Regional Coordinating Unit (RCU) of the project will act as Secretariat to the PSC and be responsible for providing PSC members with all required documents in advance of PSC meetings, including the draft ARWP and independent scientific reviews of significant technical proposals or analyses. The RCU will prepare written minutes of all PSC meetings and be responsible for logistical arrangements relative to the holding of such meetings.

Compensation: Travel and associated travel costs incurred by PSC national representatives attending PSC meetings shall be recompensed in accordance with FAO rules and regulations. No honorarium shall be paid to any person for their participation in PSC business or meetings.

Attachment 1b: REGIONAL COORDINATING UNIT (RCU)

Draft Terms of Reference

Role: The Regional Coordinating Unit (RCU), under the supervision of the Project Steering Committee (PSC), will be responsible for management of all regional activities under the programme, as well as supervision and oversight on national activities carried out through the National Task Forces (NTFs), particularly for the inputs and processes required for the development of the Transboundary Diagnostic Analysis (TDA), the Strategic Action Programme (SAP) and any additional activities agreed upon under the GEF project document. In particular, it will:

- Undertake the preparation of the Annual Regional Work Plan (ARWP), including incorporating the contents of the approved Annual National Work Plans (ANWP), and present the draft document to the PSC for its approval
- Undertake, as required by the PSC, the recruitment of members of the Regional Scientific Advisory Panel (RSAP) for independent reviews of proposals and completed studies
- Provide overall guidance to the National Coordinators (NCs) in the execution of the programme at the national level
- As provided for in the ANWPs, utilise RCU staff or recruited experts to undertake tasks of a regional nature
- Maintain records pertaining to the technical and financial aspects of programme operation, including the monitoring of programme activities and their outcomes
- Arrange for all PSC meetings, regional workshops and other multinational activities as agreed with the PSC
- Maintain minutes of PSC meetings and circulate these documents to all PSC members

Composition: The RCU shall initially comprise two international staff; a Programme Coordinator, a Chief Technical Advisor. A Monitoring and Information Specialist will be recruited regionally/nationally. These staff shall be assisted by three locally recruited skilled staff; a Financial Controller, a Senior Secretary/Office Manager and an IT/Database Clerk. There will also be three locally recruited support staff; a Secretary/Receptionist, a Driver and a Cleaner/Caretaker. Changes to this staffing may occur with the approval of the PSC and the funding agencies.

Regional Coordinator: The RCU will be under the direct management of the Regional Coordinator, and will also act as Secretary to the PSC. The Regional Coordinator will be responsible for the supervision of all RCU staff, as well as of the National Coordinators (NCs) and shall have overall responsibility, under the PSC, for programme functioning and performance. Between PSC meetings the Regional Coordinator will liaise with the current PSC chairperson and maintain effective working relations with each BOBLME member government and shall produce such periodic reports (financial and technical) as will be required. The Regional Coordinator will have the responsibility for hiring and firing locally recruited staff, in accordance with laid down procedures, and will directly supervise the activities of the Office Manager and the Senior Secretary.

The Regional Coordinator will be qualified to post-graduate level (generally Ph.D.) in either a marine discipline or management, and will have at least 12 years professional experience in the marine sector. He/she will have previous successful management experience of large

inter-disciplinary teams involving relations with senior government officials (see Attachment 1c for more detail).

Chief Technical Advisor: Under the overall supervision of the Regional Coordinator, the Chief Technical Advisor (CTA) will have primary responsibility for all programme work relating to fisheries and living marine resources and will either conduct any such work occurring at regional level, or will recruit and supervise regional and international experts to do so. He/she will also, in agreement with the Monitoring and Information Specialist, undertake monitoring of the results of studies and other activities relating to his/her area of expertise conducted by the programme, where this is not his/her own work.

The CTA will be qualified to post-graduate level (typically with a Ph.D.) in fisheries, living marine resources, or a comparable field, and will have a minimum of ten years of experience including the conduct of research and the undertaking of sector studies within the marine sector (see Attachment 1d for more detail).

Monitoring and Information Specialist: Under the overall supervision of the Regional Coordinator, the Monitoring and Information Specialist will take responsibility for planning and conducting the monitoring activities required to provide adequate information on activities undertaken through the programme and their outcomes. He/she will either undertake monitoring activities personally, or will recruit regional or international experts to do so. He/she will also supervise the monitoring activities conducted at national level by the National Coordinators. The Monitoring and Information Specialist shall also take responsibility for the operation of the programme information technology (IT) system, which will include, among other activities, a website with information on the programme, a regular printed bulletin for distribution to member governments and relevant other organizations and individuals, a financial management system, and an e-mail system for staff. He/she will directly supervise the work of the IT/Data Entry clerk and any outside contractors hired to maintain system operation.

The Monitoring and Information Specialist shall be qualified to post-graduate level in informatics, computer science, management, economics or a related discipline and have at least 6 years experience of running information systems and planning and undertaking monitoring activities (see Attachment 1e for more detail).

Locally Recruited Staff: Locally recruited staff will have responsibilities and possess qualifications as prepared by the Programme Coordinator and approved by the PSC.

Attachment 1c. REGIONAL COORDINATOR

Draft Terms of Reference

Role: The Regional Coordinator will assume general oversight and management responsibilities for the implementation of the BOBLME Project as well as act as Secretary to the Project Steering Committee (PSC). Specifically he/she will:

- Serve as the FAO's Lead Technical Unit (LTU) point of contact with the BOBLME Project;
- Supervise all RCU staff;
- Liaise with the current PSC chairperson;
- Liaise and work closely with the BOBLME's eight National Coordinators (NCs);
- Be responsible for preparation and submission of the project's periodic reporting (financial and technical), as required;
- Have the responsibility for the hiring and firing of all locally recruited staff in accordance with previously agreed on policies and procedures;
- Represent the project in relevant meetings and conferences seeking to facilitate coordination and integration where appropriate beneficial to the achievement of the Project's objectives;
- Establish working relations with appropriate national and regional agencies and groups in participating countries to ensure effective implementation of BOBLME supported activities under his/her responsibility at the national and regional level;
- Coordinate the development and preparation of Annual Work Plans;
- Review and approve draft request for proposals and bidding documents, terms of reference and performance contracts for consultants hired under the responsibility of the RCU;
- Supervise and evaluate the performance of the consultancies that shall be retained for specific activities under the responsibility of the RCU, including the mid-term and final evaluation of corresponding activities at national and regional levels; and
- Contribute to the design of a system and organize for the regular monitoring and review of the execution of the components and subcomponents.

Requisites: The Regional Coordinator must have the following skills/qualifications:

- A post-graduate degree in environmental management or natural sciences;
- At least 12 years professional experience in the marine sector;
- Solid and demonstrated understanding of the technical aspects of the field of fisheries and/or the marine environment;
- A minimum of seven years of demonstrated experience in the management of multi-country projects, preferably in the BOB region;
- Proven capacity to work with and establish working relationships with medium to high-level government and non-government representatives;
- Proven capacity as a team leader;
- Experience in working in the BOB region and knowledge of its network of BOBLME relevant regional institutions;
- Experience in working with international donors including bilateral donors; Experience in managing multi-donor projects;

- Experience in preparing project technical and financial reports for international donors; and
- Excellent oral and written communication skills in English.

Duration and Commitment: The Regional Coordinator will be contracted for a probationary period of one year subsequent to which the contract would be extended for an additional two years assuming satisfactory performance.

Attachment 1d. CHIEF TECHNICAL ADVISOR

Draft Terms of Reference

Role: Under the overall supervision of the Regional Coordinator, the Chief Technical Advisor will have the primary responsibility for all technical aspects of the Programme and will either conduct said work occurring at the regional level directly or will recruit and supervise regional and international experts to do so. Specifically he/she will:

- Liaise and work closely with the BOBLME's eight National Technical Advisers (NTAs);
- Provide technical support to NTAs and appropriate personnel in BOBLME relevant participating national technical agencies when requested through the NTA;
- Assist in the preparation of national work programmes in support of the development of the project's annual work programme;
- Assist and support the Regional Coordinator in supervising and evaluating the performance of the technical consultancies that shall be retained for specific activities under the responsibility of the RCU;
- Assist the Regional Coordinator in the technical aspects of the design of a system and in the regular monitoring and review of the execution of the components and subcomponents;
- Represent the Project in relevant BOBLME technical meetings and conferences;
- Provide the Regional Coordinator with quarterly progress reports and contribute to the development of annual work plans;
- Fulfil the duties, responsibilities and functions of the Regional Coordinator as required; and
- Support the Regional Coordinator in preparing requests for proposals and bidding documents, terms of reference and performance contracts for, and supervision of, consultancies that shall be retained for specific activities under the responsibility of the RCU.

Requisites: The Chief Technical Adviser must have the following skills/qualifications:

- A PhD with specialization in marine fisheries, marine protected areas, living marine resources (or comparable field);
- A minimum of ten years of demonstrated work experience in the technical aspects of marine ecosystems and sustainable living resources management;
- Experience in working in the BOB region and knowledge of its network of BOBLME relevant regional institutions;
- Proven capacity to work and establish working relationships with government and non-government representatives;
- Ability to work as a member of a team;
- Ability to take initiative and to work with minimum supervision; and
- Excellent oral and written communication skills in English.

Duration and Commitment: The Chief Technical Advisor will be contracted for a probationary period of one year subsequent to which the contract would be extended for an additional two years assuming satisfactory performance.

Attachment 1e. MONITORING AND INFORMATION SPECIALIST

Draft Terms of Reference

Role: Under the overall supervision of the Regional Coordinator, the Monitoring and Information Specialist will take responsibility for planning and conducting the monitoring activities required to provide the necessary information on activities undertaken through the project and their outcomes. He/she will either undertake monitoring activities personally, or will recruit regional or international experts to do so. He/she will also supervise the monitoring activities conducted at national level by the National Coordinators. The Monitoring and Information Specialist shall also take responsibility for the operation of the programme information technology (IT) system, which will include, among other activities, a website with information on the programme, a regular printed bulletin for distribution to member governments and relevant other organizations and individuals, a financial management system, and an e-mail system for staff. He/she will directly supervise the work of the IT/Data Entry clerk and any outside contractors hired to maintain system operation. Specifically he/she will:

- Assist the Regional Coordinator in the design and establishment of the Programme's M&E system;
- Coordinate initiatives to communicate the activities of BOBLME throughout the region, and to ensure high awareness of the programme;
- Oversee the design and production of communications and public awareness materials associated with the implementation of the programme at the regional level;
- Coordinate the publication and/or distribution of documents, newsletters, brochures, press releases and other public awareness materials associated with the promotion of the goals of the programme;
- Support the Regional Coordinator and Chief Technical Advisor in areas related to capacity building at the national and regional levels;
- Assist the Regional Coordinator and Chief Technical Advisor in the regular monitoring and review of the execution of the Programme supported activities; and
- Provide the Regional Coordinator with quarterly progress reports and contribute to the development of annual work-plans.

Requisites: The candidate must have the following skills/qualifications:

- A graduate degree in informatics, computer science, management and/or mass communications or its equivalent;
- Demonstrated knowledge of marine fisheries and sustainable management of marine resources management;
- Sound and clear competence in the design and development of appropriate information modules and dissemination modes;
- A minimum of six years experience in of running information systems and planning and undertaking monitoring activities;
- Ability to work as a member of a team;
- Ability to take initiative and to work with minimum supervision; and
- Excellent oral and written communication skills in English.

Duration and Commitment: The Monitoring and Information Specialist will be contracted for a probationary period of one year subsequent to which the contract would be extended for an additional two years assuming satisfactory performance.

Attachment 1f: NATIONAL TASK FORCE (NTF)

Draft Terms of Reference

Role: Each member country shall establish a multi-sectoral National Task Force (NTF) which will be responsible for guiding the implementation of the BOBLME project at national level. Specifically, it will:

- Approve the proposed Annual National Work Plan for submission to the Regional Coordinating Unit (RCU). The work plan will comprise reviews of activities undertaken and/or completed over the last year, as well as proposals for national project activities to be conducted over the next year;
- Establish the specifications, contents and a time frame for national work plan activities approved by the Project Steering Committee, and their resulting reports;
- Support the National Coordinator in overseeing the execution of national activities, and national components of regional activities undertaken within the country;
- In collaboration with the National Coordinator and RCU, request members of the National Scientific Advisory Panel (NSAP) to conduct independent evaluations of significant technical proposals, assessments and analyses, and take account of such comments;
- Convene, as required, thematic sub-groups to consider reports covering specific technical areas and associated NSAP evaluations;
- Schedule, organize and conduct such national workshops as may be decided upon in consultation with the National Coordinator and RCU;
- Ensure adequate communication of national activities to all stakeholders, including government, private sector and NGOs, and invite and encourage the participation of non-NTF stakeholders, particularly local groups, in national activities and consultations when appropriate.

Establishment: The NTF shall be established as soon as possible following the first meeting of the BOBLME Project Steering Committee (PSC).

Membership: Where possible, national governments will attempt to ensure that the NTF will be composed of representatives of: (a) all relevant Government Ministries and agencies; (b) the FAO and World Bank national offices, as observers (if present); (c) national non-governmental organizations (NGOs) active in the areas of the environment, community development, women, fishery and other areas with respect to coastal and marine areas; (d) business and industrial associations representing private enterprises with an interest in marine, tourism and coastal activities; (e) senior academics and researchers working in the area of coastal and marine issues, and; (f) other stakeholders as deemed necessary. International donor agencies and NGOs active nationally in areas relevant to the project shall be offered observer status. The National Coordinator will act as Chairperson of the NTF. No member of the NTF may also concurrently serve on the Regional or National Scientific Advisory Panels (RSAP/NSAP).

Thematic Working Groups: In consultation with the National Coordinator, the NTF shall, where deemed useful and necessary, establish small thematic working sub-groups in areas such as fisheries resources, oceanography, biodiversity, coastal zone management, aquaculture, legislation and socio-economics, to consider specific technical issues. Each sub-

group will be led by a sectoral specialist from the NTF but membership may include specialists from the NSAP where appropriate.

Meetings: The National Task Force shall meet at least twice per year. One NTF meeting annually should focus on the review and approval of the Annual National Work Plan.

Attachment 1g. NATIONAL COORDINATOR

Terms of Reference

Role: The National Coordinator will take primary responsibility for the implementation of BOBLME activities within his/her country of operation and will ensure that all national inputs and processes required for the development of the Transboundary Diagnostic Analysis (TDA), the Strategic Action Programme (SAP) and any additional activities agreed upon under the GEF project document are adequately prepared and carried out. Specifically he/she will:

- Act as Chairperson and Secretary of the National Task Force (NTF), with responsibility for convening meetings, drafting agendas and assembling and preparing materials for consideration by the NTF;
- In consultation with the RCU, identify nominations for the National Scientific Advisory Panel (NSAP) and arrange for their pre-approval by FAO;
- In consultation with the NTF and RCU, determine those proposals and studies requiring evaluation by the NSAP, select appropriate members of the NSAP for this purpose, and prepare TORs for their work;
- In consultation with the NTF and RCU, identify consultants to undertake national level assignments in accordance with the approved Annual Work Plan, and submit all required documentation to the RCU for their approval and contracting;
- Monitor and supervise the work of the above consultants, and as far as possible, ensure the timely and responsive delivery of contracted outputs;
- Provide assistance and support to staff of the RCU or regional consultants visiting, or engaged in assignments in, his/her country of responsibility, including preparing itineraries, appointments and assisting with travel and other logistical arrangements;
- In consultation with the NTF, determine dates, agendas, budgets and participation for national workshops, and upon approval of these plans by the RCU, undertake the organization and conduct of the workshops;
- Ensure adequate communication of national activities to all stakeholders, including government, private sector and NGOs, and invite and encourage the participation of non-NTF stakeholders, particularly local groups, in national activities and consultations when appropriate.

The NC is expected and shall be able to contact and coordinate as necessary with other relevant government ministries and departments and state and local authorities whose input is important to the BOBLME Project, consistent with appropriate government communication channels.

Requisites: The National Coordinator shall be a senior official or expert in the field of fisheries and/or the marine environment nominated by the national Government and technically cleared by FAO. He/she shall have at least 10 years of demonstrable experience in the scientific and technical fields of fisheries (including aquaculture) and have a sound knowledge of environmental issues affecting coastal and marine resources. He/she shall have strong leadership capabilities, experience with regional fisheries bodies/agencies and possess proven experience in the administration and management of complex programmes, as well as having strong written and oral communication skills in English.

Duration and Commitment: The minimum period of appointment of the National Coordinator shall be two years, and where the position is filled by a government staff member, the government shall provide written confirmation that the BOBLME process will have priority over other duties to which he/she may also be assigned.

Collaboration: The National Coordinator shall communicate and/or meet with the Regional Coordinator on a regular basis to ensure timely delivery of national inputs and to request assistance to address any problems that may arise during the course of the process, including the identification and recruitment of specialists unavailable within the country. He/she will also collaborate closely with any organization or individual undertaking an approved BOBLME regional activity or study which requires action or input.

Attachment 1h. NATIONAL TECHNICAL ADVISER

Draft Terms of Reference

Role: The full-time National Technical Adviser (NTA), under the overall guidance and supervision of the National Coordinator (NC), will ensure that all BOBLME in-country activities in support of the Transboundary Diagnostic Analysis (TDA), the Strategic Action Programme (SAP) and any additional activities agreed upon under the GEF project document are adequately prepared and carried out. Specifically he/she will:

- Advise the National Coordinator's (NC) and facilitate his role as Chairperson and Secretary of the National Task Force (NTF), with responsibility for convening meetings, drafting agendas and assembling and preparing materials for consideration by the NTF;
- In consultation with the RCU, advise the NC on the identification of nominations for the National Scientific Advisory Panel (NSAP) and prepare TORs for their work;
- In consultation with the NTF and RCU, review and comment on technical studies and proposals requiring evaluation by the NSAP;
- In consultation with the NTF and RCU, identify and evaluate consultants to undertake national level assignments in accordance with the approved Annual Work Plan and forward required documentation to the NC;
- Monitor and supervise the work of the above consultants, and as far as possible, ensure the timely and responsive delivery of contracted outputs;
- Provide assistance and support to staff of the RCU or regional consultants visiting, or engaged in assignments in his/her country of responsibility, including preparing itineraries, appointments and assisting with travel and other logistical arrangements;
- In consultation with the NTF, advise and recommend the NC on dates, agendas, budgets and participation in national workshops. Upon approval of these plans by the NC and subsequently the RCU, facilitate the organization and conduct of the workshops;
- Facilitate adequate communication of national activities to all stakeholders, including government, private sector and NGOs, and invite and encourage the participation of non-NTF stakeholders, particularly local groups, in national activities and consultations when appropriate.

Similar to the NC, for technical matters, the National Technical Adviser is expected and shall be able to contact and coordinate as necessary with other technical counterparts in other relevant government ministries and departments and state and local authorities whose input is important to the BOBLME Project, consistent with appropriate government communication channels.

Requisites: The NTA shall be a senior technical expert in the field of fisheries and/or the marine environment nominated by the national government and technically cleared by the FAO. He/she shall have at least ten years of demonstrable experience in the scientific and technical fields of fisheries (including aquaculture) and have a sound knowledge of environmental issues affecting coastal and marine resources. He/she shall have strong leadership capabilities, experience with regional fisheries bodies/agencies and possess proven experience in the administration and management of complex programmes, as well as having strong written and oral communication skills in English.

Duration and Commitment: The minimum period of appointment of the NTA shall be two years, and where the position is filled by a government staff member, the government shall provide written confirmation that the BOBLME process will have priority over other duties to which he/she may also be assigned.

Collaboration: The NTA shall communicate and/or meet with the NC on a regular basis to ensure timely delivery of national technical inputs and to request assistance to address any problems that may arise during the course of the process, including the identification and recruitment of specialists unavailable within the country. He/she will also collaborate closely with any organization or individual undertaking an approved BOBLME regional activity or study in his/her respective country which requires action.

Attachment 1i. REGIONAL SCIENTIFIC ADVISORY PANEL (RSAP)

Terms of Reference

Role: The function of the RSAP is to provide independent advice and comments on the technical and scientific contents of all significant regional proposals, evaluations, assessments and reports.

Membership: The panel will consist of internationally recognized experts, normally trained to the Ph.D. level, with substantial experience gained from both Western and Eastern sections of the BOBLME area in the fields of living marine resources, oceanography, marine pollution, coastal management and related environmental, management and socio-economic issues. Preference will be given to citizens or residents of BOBLME member countries. The panel will comprise a minimum of three experts in each principal thematic area. Experts serving on the RSAP will not be eligible for membership of the PSC or NTFs.

Selection: The members of the RSAP shall be nominated by National Coordinators, the Project Steering Committee (PSC), project donors and FAO. Final selection will be made by FAO after consultation with the PSC and project donors.

Functioning: In consultation with the RCU, the PSC will determine which documents shall be subject to independent scientific review. However, reviews shall always be conducted of proposals for major activities to be included in the Annual Work Plan as well as for reports arising from such activities. The members of the panel are not expected to meet and their work will be conducted under the peer review system. Normally, a thematic paper will be reviewed by three panel members who are experts in that area. Broader papers will be reviewed by at least one expert from each of the areas of relevance to the document or proposal.

Compensation: Experts selected for membership of the RSAP will have their CVs and honorariums pre-approved by FAO but will be paid only on an ‘as-and-when-employed’ basis. The RCU, in consultation with the PSC and FAO, shall determine the level of effort required for each review.

Attachment 1j. NATIONAL SCIENTIFIC ADVISORY PANEL (NSAP)

Terms of Reference

Role: The function of the NSAP is to provide independent advice and comments on the technical and scientific contents of all significant national proposals, evaluations, assessments and reports.

Membership: The panel will consist of nationally recognized experts, normally trained to M.Sc. or Ph.D. level, either from the country or with extensive national experience, in the fields of living marine resources, oceanography, marine pollution, coastal management and related environmental, management and socio-economic issues. The panel will comprise a minimum of two experts in each principal thematic area. NSAP panel members are not eligible for membership of the PSC or NTFs.

Selection: The members of the NSAP shall be nominated by National Coordinators, national governments and their agencies, project donors and FAO. Final selection will be made by the RCU after consultation with the National Coordinator and FAO.

Functioning: In consultation with the RCU, the NTF will determine which documents shall be subject to independent scientific review. However, reviews shall always be conducted of proposals for major national activities to be included in the Annual Work Plan as well as for reports arising from such activities. The members of the panel are not expected to meet and their work will be conducted under the peer review system. Normally, a thematic paper will be reviewed by two panel members who are experts in that area. Broader papers will be reviewed by at least one expert from each of the areas of relevance to the document or proposal.

Compensation: Experts approved for membership of the NSAP will have their CVs and honorariums pre-approved by FAO but will be paid only on an ‘as-and- when-employed’ basis. The NTF, in consultation with the RCU, shall determine the level of effort required for each review.

ANNEX 7: STAKEHOLDER CONSULTATION PLAN AND INFORMATION DISSEMINATION

The project's development objective is to support the development of a Strategic Action Programme (SAP) whose implementation over time will lead to enhanced food security and reduced poverty for coastal communities in the BOB region. Global benefits will accrue from elements of the SAP's implementation which will lead to an environmentally healthy BOBLME. To achieve the project's proposed Development and Global Environmental Objectives, building in stakeholder consultation, at all levels, was a primary consideration in its design. Stakeholder participation began in the very earliest stages of project preparation. Using PDF-B funding, this process involved: (i) the establishment of a Project Steering Committee; (ii) the establishment of national task forces and national steering committees, (iii) a comprehensive literature review, (iv) preparation of national reports, (v) national consultations, (vi) regional thematic papers, (vii) international peer review, and (viii) experts' meetings. This process led to the identification and agreed on priority issues, barriers, and needed measures to address the issues and subsequently guided the development of the proposed project structure and activities.[24]

Once priorities were agreed to by BOBLME countries, a three-day participatory logical framework workshop provided the basis for identifying a series of relevant activities to be supported under the project.[25] The common features among these activities were to: (i) promote the development of regional and sub-regional collaborative approaches among the 8 BOBLME countries to address one or more issues identified as transboundary priorities; and (ii) provide critical inputs to inform the SAP formulation process and "enrich" and strengthen the SAP itself. For more detail on these processes and relevant documentation, see ***Annexes 3 and 4*** respectively.

The main outputs of the programme's first phase will be the development of the Strategic Action Programme (SAP) and the establishment of permanent and eventually, financially-sustainable, institutional arrangements which, together with the countries, will be responsible for guiding and implementing the long-term BOBLME Programme. The SAP will provide the "roadmap" that will guide future programme-supported interventions which in turn will be based in part on the finalized transboundary diagnostic analysis (TDA). As a result, most of the project resources in Phase 1 are oriented towards foundation building with more substantial field activities likely to take place in the second and subsequent phases of the BOBLME Programme. Stakeholder participation in the "foundation building" process is viewed as essential to the long-term sustainability of the BOBLME Programme.

A key input into the development of the SAP will be the experience and "lessons learned" and "products" derived from pilot field activities supported under the first phase project. Moreover, given the size and complexity of the priority issues to be addressed by field activities in the BOBLME, project-supported interventions addressing new, collaborative approaches will necessarily have to be pilots (e.g., collaborative approaches to managing living marine resources, transboundary critical habitats, and pollution hotspot monitoring). Moreover, all of the demonstrative field activities identified as priorities involve regional or

[24] A key outcome of this process was the development of Project's draft Framework TDA (FTDA) which is currently under review by the BOBLME countries.

[25] See summary of 1st Technical Meeting held in Bangkok 27 -29 April, 2004 on the BOBLME website (http://www.fao.org/fi/boblme/website/index.htm).

sub-regional approaches among the participating BOBLME countries to address critical issues in a collaborative means. Based on the increased trust and confidence between the participating countries and the "lessons learned" stemming from these activities, coupled with the creation of solid foundation, many of the subsequent activities identified in the SAP are likely to be based on the building and replicating of what has been successfully achieved under the first phase. To ensure that these and other inputs are relevant to the SAP, and the SAP itself is relevant to the BOBLME Programme, stakeholder participation is viewed as critical to BOBLME success.

The major stakeholders relevant to project objectives can be classified into three groups, regional, national and local stakeholders. Regional stakeholders include multilateral/bilateral development agencies and programmes, regional development banks, and international NGOs. National stakeholders include national and state government agencies, civil society organizations, NGOs, private foundations, private sector organizations, and academic institutions. Local/beneficiary stakeholders comprise local government agencies, commercial and rural fishers and their families, school teachers, students and rural youth, coastal/marine tour operators and their clients, local environmental and social/cultural NGOs, and other local citizens.

During project implementation, stakeholder participation is included in all project components at varying levels of intervention. At the community level, local participation is specifically identified and costed as key inputs into the: (i) "stocktaking" activities (subcomponent 2.1); (ii) local capacity improvements as part of policy "mainstreaming" (subcomponent 2.2); (iii) development of all project-supported fishery management and critical habitat plans (subcomponents 2.3 and 2.4, respectively); and (iv) case studies and development of guidelines associated with assessing the role of fish refugia in the management of fish stocks in the BOBLME (subcomponent 3.1). Consultations at the national level will be ensured through the creation of project-wide National Coordinators and Project Task Forces. National consultations are the "heart" of the processes leading to the finalization of BOBLME institutional arrangements (subcomponent 1.2) and the development of an agreed on SAP (Component 1). Additionally, specific national consultations have been included and costed as workshops (subcomponent 2.1), national fishery task forces (component 2.3), and commissions (2.4). Finally, at the regional level there are a large number of workshops and consultations which will be supported across many of the components as well as the project-wide regional collaboration supported under the improved BOBLME "predictability" subcomponent (3.2) and information dissemination subcomponent (5.3).

Dependent on the stakeholder group and the nature of the participation, the means to facilitate consultation include: (i) use of local focus groups; (ii) workshops (local, national, regional); (iii) case studies (e.g., field-based post project evaluations); (iv) surveys; and (v) on-line messaging through the project webpage.

Over half of the consultations dominated by local and national events, fall under the project's Sustainable Fishery Assessment and Management subcomponent (2.3) for obvious reasons. Other subcomponents with a relative large number of consultations are policy harmonization and the SAP formulation process itself.

In addition to these consultative "events," while not included in the figures provided above, there exist a number of other opportunities where consultations will occur through training,

public awareness, and media campaigns supported under the project. See Annex 4 for more detail.

Dissemination of Project Information

During the preparation of the BOBLME Project a number of the BOB governments emphasized their view that particular attention should be given to improved dissemination of knowledge concerning the Bay of Bengal Large Marine Ecosystem and the activities of the project itself. As a result, the dissemination of general information as well as project activities and results is considered to be an important element of the project.

This task will be the second major responsibility of the Monitoring and Information Specialist and a communications programme will be appended to the Annual Regional Work Plan, as well as a report summarizing communications activities over the past year. The Monitoring and Information Specialist will be supported by an assistant trained in desk-top publishing/website maintenance. Three specific target audiences are envisaged: national governments (in all BOBLME member countries), the regional and international scientific community, and the general public. Specific strategies and products will be developed to ensure that all three groups are reached.

Communications and dissemination tools will include a dedicated BOBLME website, press releases, and promotional materials (e.g. brochures, posters). Periodic bulletins will be circulated to all NTF member institutions, research organizations, and relevant NGOs. During the course of the project a number of major communications efforts, for example the preparation of videos and similar materials for use on television and in schools, will be prepared using external specialists. Resources are provided in the project budget for the design and start-up of the website which will contain reports, news and public relations material, as well as for publishing costs for bulletins etc
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ANNEX 8: DOCUMENTS IN THE PROJECT FILE

Documents Available on the Internet for Public Consultations
*(http://www.fao.org/fi/boblme/website/reports.*htm)

National Reports

Hossain, M.M.M. (2003) National Report of Bangladesh. Unpublished report prepared for the BOBLME Programme. Unedited version.

Sampath, V. (2003) National Report of India. Unpublished report prepared for the BOBLME Programme. Unedited version.

Purnomohadi, S. H. (2003) National Report of Indonesia. Unpublished report prepared for the BOBLME Programme. Unedited version .

Omar, I.H. (2003) National Report of Malaysia. Unpublished report prepared for the BOBLME Programme. Unedited version.

Ali, M. (2003) National Report of the Maldives. Unpublished report prepared for the BOBLME Programme. Unedited version.

Myint, P. (2003) National Report of Myanmar. Unpublished report prepared for the BOBLME Programme. Unedited version.

Joseph, L. (2003) National Report of Sri Lanka. Unpublished report prepared for the BOBLME Programme. Unedited version.

Juntarashote, K. (2003) National Report of Thailand. Unpublished report prepared for the BOBLME Programme. Unedited version.

Workshop Reports

BOBLME /REP/1 (2003) Verlaan, P.A. (ed.) Report of the First Regional Workshop of the Bay of Bengal Large Marine Ecosystem Programme. Pattaya, Thailand, 17-21 February 2003. BOBLME, Report No. 1, Chennai, India, in 2 volumes: Vol. 1, 40 pp., Vol. 2, 134 pp.

BOBLME/REP/2 (2004) Report of the Preparatory Meeting for the Second Regional Workshop of the BOBLME Programme. Penang, Malaysia, 15-17 March 2004. Unpublished provisional version.

BOBLME/REP/3 (2004) Report of the First Technical Meeting of the BOBLME Programme. Bangkok, Thailand, 27-29 April 2004. Unpublished provisional version.

BOBLME/REP/4 (2004) Report of the Second Regional Workshop of the BOBLME Programme. Colombo, Sri Lanka, 25- 29 October 2004. Unpublished provisional version.

BOBLME/REP/5 (2007) Report of the Appraisal Workshop of the BOBLME Programme. Bangkok, Thailand, 18 – 19 June 2007. Unpublished provisional version.

BOBLME/1PSC (2001) Report of the First Project Steering Committee Meeting of the BOBLME 28-29 January 2002, Chennai.

BOBLME/2PSC (2003) Report of the Second Project Steering Committee Meeting of the BOBLME 19 February 2003.

BOBLME/3PSC (2004) Report of the Third Project Steering Committee Meeting of the BOBLME 17 March 2004.

BOBLME/4PSC (2004) Report of the Fourth Project Steering Committee Meeting of the BOBLME 29 October 2004.

Theme Consultant Reports

Angell, C.L. (2004) Review of Critical Habitats: Mangroves and Coral Reefs. Unpublished report prepared for the BOBLME Programme. Unedited version.

Edeson, W. (2004) Review of Legal and Enforcement Mechanisms in the BOBLME Region. Unpublished report prepared for the BOBLME Programme. Unedited version.

Kaly, U.L. (2004) Review of Land-based Sources of Pollution to the Coastal and Marine Environments in the BOBLME Region. Unpublished report prepared for the BOBLME Programme. Unedited version.

Preston, G.L. (2004) Review of the Status of Shared/Common Marine Living Resource Stocks and of Stock Assessment Capability in the BOBLME Region. Unpublished report prepared for the BOBLME Programme. Unedited version.

Townsley, P. (2004) Review of Coastal and Marine Livelihoods and Food Security in the BOBLME Region. Unpublished report prepared for the BOBLME Programme. Unedited version.

Other Documents in Written Text Only

Reviews by the International Scientific Group Members

Adam, M.S. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Hassan, M.N. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Kamal, M. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Ramachandran, S. (2004). Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Saraya, A. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Sivasubramaniam, K. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Thwin, S. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Widodo, J. (2004) Review of the Theme Reports by Angell, Kaly, Preston and Townsley. Unpublished report prepared for the BOBLME Programme.

Country Reports Presented at the First Regional Workshop

Ismail, bin A.K., Noordin, R.M., Abu Talib, bin A., Junaidi, bin C.A. (2003) The Pressures on the Marine Environment and its Living Resources in the Eastern Corridor of the Straits of Malacca. Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 90-96. Unedited version available.

Jayakody, D.S. and Maldeniya, R. (2003) Status of and Threats to Living Marine Resources of Sri Lanka. Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 116-121. Unedited version available.

Martosubroto, P. and Willmann, R. (2003) An Ecosystem Approach to Fisheries Management in the Bay of Bengal. Report of the First Regional Workshop,Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 34-46. Unedited version available.

Mazid, M.A. (2003) Status and Potential of the Marine Fisheries Resources and Marine Environment of Bangladesh. In: Report of the First Regional Workshop,Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 49-63. Unedited version available.

Myanmar Department of Fisheries (2003). Status of and Threats to Living Marine Resources in Myanmar. Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 107-115. Unedited version available.

Nair, M.K.R. & Diwan, A.D. (2003) The Status and Issues of the Bay of Bengal Large Marine Ecosystem. In: Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 64-70. Unedited version available.

Nootmorn, P., Chayakun, R., Chullasorn, S. (2003) The Andaman Sea Marine Ecosystem in Thailand. Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 122-131. Unedited version available.

Preston, G.L. (2004) Review of the Status of Shared/Common Marine Living Resource Stocks and of Stock Assessment Capability in the BOBLME Region. Unpublished report prepared for the BOBLME Programme. Unedited version available.

Senthil Vel, A. (2003) Coastal Zone Management in India. In: Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp.71-81. Unedited version available.

Sherman, K. (2003) Assessment and Restoration of Large Marine Ecosystems. In: Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 8-31. Unedited version available.

Tambunan, P. (2003) Status of and Threats to Living Marine Resources in Indonesia. Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 82-89. Unedited version available.

Waheed, A., Hafiz, A., Ali, M., Nazeef, I. (2003) Living Marine Resources of Maldives - Status and Threats. Report of the First Regional Workshop, Verlaan, P.A., ed., BOBLME/REP/1, Volume 2, pp. 97-106. Unedited version available.

List of Consultations

The logical framework of the programme developed during the technical meeting held at Bangkok Thailand during 27-29 April *2004.* List of participants is at Annexure-I.

Date	Meeting	Venue	Observations
29.1.2003	India - National Task Force	New Delhi	Establishing of the National Task Force and to guide in the preparation of the national, regional, thematic and summary report.
12.9.2003	India - National Task Force	New Delhi	Finalization and seeking comments and suggestions on the National Report
04.6.2004	India - Special Task Force	New Delhi	To discuss the Logical Frame Work
8.3.2003	Bangladesh - National Task Force	Dhaka	First National Task Force Meeting
18.9.2003			Comments and suggestions on the National Report
03.2.2003	Indonesia - National Task Force	Jakarta	Nomination of NC, NRG members
08.9.2003			Comments and suggestions on the National Report
4.4.2003	Malaysia - National Task Force	Penang	Nomination of the NRG and ISRG members
2.9.2003		Kuala Lumpur	Seeking comments and suggestions on the National Report
20.4.2003	Maldives - National Task Force	Maldives	Nomination of NC, NRG and ISRG members
25.1.2004			Comments and suggestions on the National Report
4.2.2003	Myanmar - National Task Force	Yangon	Discussions on how to protect the health of the Ecosystems and manage the living resources of the BOB improving food and livelihood security. Nomination of NC, NRG and ISRG members.
4.9.2003			Second National Task Force Meeting
2.4.2003	Sri Lanka - National Task Force	Colombo	Nomination of NC,NRG and ISRG members
12.9.2003			Second National Task Force Meeting
21.3.2003	Thailand - National Task Force	Bangkok	Nomination of NC, MRG and ISRG Members
26.8.2003			Second National Task Force Meeting
30-31/10/2003	India – National Workshop	Chennai	National Workshop
18-19/12/2003	Bangladesh - National Workshop	Dhaka	National Workshop
23-24/10/2003	Indonesia - National Workshop	Bogor	National Workshop
20-21/10/2003	Malaysia - National Workshop	Penang	National Workshop
30-31/12/2003	Maldives - National Workshop	Male	National Workshop
04.2.2003	Myanmar - National Workshop		National Workshop
11-12/11/2003	Sri Lanka - National Workshop	Colombo	National Workshop
29-30/10/2003	Thailand - National Workshop	Bangkok	National Workshop

Date	Meeting	Venue	Observations
Project Steering Committee Meetings			
28-29.1.2002	1st Project Steering Committee Meeting	Chennai	Nomination of NC and PCS members Preparation for the 1st Regional Workshop
19.2.2003	2nd Project Steering Committee Meeting	Pattaya	Guidelines and dates were decided for holding the National workshops and National Task Force meetings
17.3.2004	3rd Project Steering Committee Meeting	Bangkok	Co-funding of projects/activities
29.10.2004	4th Project Steering Committee	Colombo	
Regional Workshops			
17-21.2.2003	First Regional Workshop	Bangkok	
25-30.10.2004	Second Regional Workshop	Colombo	Draft Project Proposal approved
Other Workshops			
15-17.3.2004	Preparatory Meeting	Penang	Member countries were requested to obtain endorsements for potential sources of co-financing activities
27-29.4.2004	First Technical Meeting	Bangkok	Developed and reached agreement on a draft Logical framework
18-19.6.2007	Appraisal Workshop	Bangkok	Member countries approve modified project document

ANNEX 9: PROJECT REPORTING, MONITORING AND EVALUATION

Monitoring of project activities and the ensuing evaluation of their impact will serve a dual function. First, it will facilitate tracking of progress toward the achievement of the project's development and global environmental objectives. Second, it will facilitate learning and generation of knowledge necessary for the preparation of follow-on phases of the BOBLME Programme.

Project monitoring and evaluation and project reporting will be conducted in accordance with standard FAO procedures, while at the same time respecting GEF guidelines and requirements. The Project Logical Framework in ***Annex 3*** provides performance and impact indicators for project implementation along with the corresponding means of verification. The indicators will be further elaborated during Project Year 1 in close consultation with the PMS, FAO, World Bank and other BOBLME partners with a view to ensuring that a common set of indicators are utilized by both the RCU and BOBLME participating agencies.

Project evaluations will include an assessment of the quality of the coordination between the various entities involved in managing BOBLME activities: the RCU, NTF/NTC, and RSAP and NSAP, and the effectiveness of the whole in providing timely financial and technical assistance to the participating countries.

All technically cleared reports should be copied to **TC-FPMIS-DataQuality@fao.org** so that they can be uploaded and maintained in the corporate project database under the Field Programme Management Information System (FPMIS).

Monitoring

Monitoring Arrangements

Monitoring of project progress and outcomes would be a central function of the Regional Coordinating Unit (RCU) and will be the responsibility of the regionally/nationally recruited Monitoring and Information specialist (who will also be responsible for IT issues). He/she will be supported at the regional level by a database/IT clerk and at country level by National Coordinators. Resources are provided in the project budget for the finalization of a monitoring system upon project start-up.

Indicators for monitoring purposes will be drawn from the Results Framework (see Annex 3), adjusted where necessary and justified. Specific monitoring tasks will be defined in the context of technical and disbursement plans contained in the Annual Regional Work Plan (ARWP), broken down by quarter (see below). Each ARWP will contain a monitoring programme for the proposed activities, indicating which activities would require field interventions to gather data, and whether the task would be undertaken by the RCU staff member, the relevant National Coordinator or, in some cases, outside consultants.

Monitoring information may also be obtained from the independent scientific reviews conducted by members of either the Regional or National Scientific Advisory Panels (RSAP and NSAP, respectively), although this would largely be limited to assessment of research quality.

Each ARWP will contain a monitoring report, detailing the results of the previous year's monitoring activities.

Monitoring of Project Progress

Project progress will be monitored largely through the recording and verification of inputs, including financial disbursements and technical levels-of-effort. Financial inputs (disbursements) will be largely drawn from FAO's financial management system, while technical inputs will be drawn from reports from National Coordinators and regional sub-contractors. The monitoring system will specifically compare financial disbursements to technical activities programmed in the ARWP and identify and assess any significant discrepancies between the two.

Monitoring Activity Outcomes

The monitoring of activity outcomes will constitute the second major output of the monitoring system. In some cases outcomes will be identifiable through evidence of training sessions, workshops or other activities. In others, the independent scientific review panels will provide confirmation of satisfactory results from studies etc. In some instances, however, it is anticipated there will be the need for physical inspection and/or surveying of activity sites and participants in order to confirm appropriate outcomes and assess their congruence with ARWP objectives. This latter task would often be undertaken by the relevant National Coordinator, or the Monitoring and Information Specialist (the latter particularly for regional activities), but may sometimes require the use of external consultants, and provision is made in the budget for their recruitment.

Evaluation

Project Impact

The project will not directly attempt to evaluate project impact, as this is more appropriately undertaken by external assessors during project mid-term and final evaluations (see below). However, the availability of baseline data may be critical for subsequent impact evaluation, and in the annual monitoring work programme the RCU will nominate those activities believed to be of particular significance and for which, as a result, baseline assessment is considered cost-effective. The collection of baseline data would normally be contracted to an independent consultant not involved in project execution, working under the guidance of the National Coordinator and the Monitoring and Information Specialist.

Ex-post data gathering may also occur where this is specifically requested by the Executing or Implementing Agencies or, more commonly, by the project mid-term or final evaluation mission prior to their arrival or during their mission.

Mid-term Evaluation

An independent Mid-term Evaluation will be undertaken at the end of the second year of project implementation. The Mid-term Evaluation will determine progress being made towards achievement of outcomes and will identify corrective actions if necessary. It will, *inter alia*:

a) review the effectiveness, efficiency and timeliness of project implementation;
b) analyse effectiveness of implementation and partnership arrangements;
c) identify issues requiring decisions and remedial actions;
d) identify lessons learned about project design, implementation and management;
e) highlight technical achievements and lessons learned;
f) analyse whether the project has achieved any of the benchmarks for moving towards Phase 2 of the BOBLME; and
g) propose any mid-course corrections and/or adjustments to the Work Plan as necessary.

The Terms of Reference for this Mid-term Evaluation will be prepared in close consultation with PBEE and the TCI GEF unit in accordance with FAO's evaluation procedures and taking into consideration evolving guidance from the GEF M&E Unit. The TORs will be discussed with and endorsed by the participating BOB countries and BOBLME partners.

Final Evaluation

An independent final evaluation will take place three months prior to the terminal review meeting of the BOB participating countries and BOBLME partners and will focus on the same issues as the Mid-term Evaluation. In addition, the final evaluation will review project impact, analyse sustainability of results and whether the project has achieved its development and global environmental objectives and benchmarks prior to moving into the second phase of the programme. It will furthermore provide recommendations for follow-up actions and for the design of the BOBLME Phase 2.

As with the Mid-term Evaluation, the Terms of Reference for the Final Terminal Evaluation will be prepared in close consultation with PBEE, and the FAO GEF unit, in accordance with FAO's evaluation procedures and taking into consideration evolving guidance from the GEF M&E Unit. The TORs will be discussed with and endorsed by the participating BOB countries and BOBLME partners.

All technically cleared reports should be copied to **TC-FPMIS-DataQuality@fao.org** so that they can be uploaded and maintained in the corporate project database under the Field Programme Management Information System (FPMIS).

Project Reporting

Project Inception Report

For the project's first year, each project staff member will prepare an inception report for the Regional Coordinator to include an individual work plan. The Regional Coordinator will in turn, prepare the Project Inception Report (PIR) in close collaboration with the BOB participating countries, FAO, World Bank and participating donors. It will include a detailed

Regional Annual Work Plan divided into monthly timeframes detailing the activities and progress indicators that would guide implementation during the first year of the project. The Work Plan should include, *inter alia:*

a) dates of specific field visits,
b) national and regional meetings,
c) Project Steering Committee and other key decision-making meetings,
d) technical support and review missions,
e) workshops/training sessions to be organized and
f) outputs to be produced.

The PIR will also include the detailed project budget for the first full year of implementation, including any monitoring and evaluation requirements to measure project performance during the year.

The Project Inception Report will include a detailed narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities, and an update of any changed external conditions that may affect project implementation.

The draft report will be circulated to project partners for review and comments. The final version will be submitted to the Lead Technical Unit, Budget Holder, FAO GEF Coordination Unit, PBEE and posted on the FPMIS.

Quarterly Project Implementation Reports (QPIR)

During each project year (PY), Quarterly Project Implementation Reports (QPIR) will be prepared. The QPIR requires the FAO budget holder to review the project regularly, to compare approved work plans with actual performance, and to take corrective action as required. The QPIR is used to identify constraints, problems or bottlenecks that impede timely implementation and take appropriate remedial action. QPIRs should also be copied to the FAO GEF Unit in the Investment Centre Division (TCI) for monitoring purposes.

Project Progress Reports

The Regional Coordinator will have the responsibility to prepare a semi-annual Project Progress Report using the standard FAO format, which will be tailored to address GEF objectives and concerns, and which will contain *inter alia*:

a) an account of actual implementation of project activities compared to those scheduled in the Annual Work Plan, and the achievement of outputs and progress towards achieving the project objectives, based on the project progress and impact indicators as contained in the Project Logical Framework in Annex 3, the Project Inception Report and as further defined in PY 1;
b) identification of any problems and constraints (technical, human, financial, etc.) encountered in project implementation and the reasons for these constraints;
c) clear recommendations for corrective actions in addressing key problems resulting in lack of progress in achieving results;
d) lessons learned; and
e) a detailed work plan for the next reporting period.

Project Implementation Review (PIR)

The Project Implementation Review is an annual monitoring process mandated by the GEF. Each year the independent GEF Monitoring and Evaluation Unit provides the scope and contents of the PIR. The PIR is an essential management and monitoring tool and will be an important source of information for extracting lessons learned from ongoing projects. Once BOBLME has been under implementation for a year, a PIR will be completed annually for each year (beginning 1 July and ending on 30 June). The draft PIR will be prepared by the Regional Coordinator and will be discussed with the Project Steering Committee, the LTU, BH and FAO GEF Unit prior to its finalization.

The PIR, together with the reviews of other GEF projects in which FAO is the GEF designated Executing Agency, will be collected, reviewed and analysed by the FAO GEF Coordination Unit, PBEE and relevant divisions by focal area, theme and region for common issues/results and lessons. The focal area PIRs will then be discussed in the GEF Interagency Focal Area Task Forces scheduled approximately every November and consolidated reports by focal area will be collated by the GEF Independent M&E Unit based on Task Force findings.

Technical and Field Reports

Field documents and consultants' reports on various technical matters may be prepared and issued in any appropriate language, under the authority of the Regional Coordinator, with copies provided to the participating BOB countries and partners, GEFSEC, FAORs and FAO technical officers and librarians concerned in the FAO Regional/Subregional Offices and in FAO headquarters and posted on the FPMIS.

Project Terminal Report

In the concluding months of the project and not later than six months before the end of the project, the Regional Coordinator will prepare a draft Terminal Report for technical clearance, finalization and submission to both participating countries, BOBLME partners and the GEF. The draft report should be made available to the final project evaluation mission. The Terminal Report will assess in a concise manner, the extent to which the project's scheduled activities have been carried out, its outputs produced, progress made towards the achievement of the Development and Global Environmental Objectives based on objectively verifiable project progress and impact indicators, institutional structures and coordination arrangements implemented, and lessons learned. It will also present recommendations for any future follow-up action arising out of the project. Upon conclusion of the project, it will be finalised and submitted to the participating BOB countries, BOBLME partners, technical officers in the FAO Regional/Sub-regional Offices and in FAO headquarters, and posted on the FPMIS.

ANNEX 10: FINANCIAL MANAGEMENT AND REPORTING

Financial Records.

1. FAO shall maintain a separate account in United States dollars for the project showing all income and expenditures. Expenditures incurred in a currency other than United States dollars shall be converted into United States dollars at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the project in accordance with its regulations, rules and directives

Financial Reports

2. FAO shall prepare six-monthly expenditure accounts for the project, showing amount budgeted for the year, amount expended since the beginning of the year, and, separately, the unliquidated obligations as follows:

a. Details of project expenditures on an activity-by-activity basis, reported in line with project budget codes as set out in the Project Document, as at 30 June and 31 December each year.

b. Final accounts on completion of the project on an activity-by-activity cumulative basis, reported in line with project budget codes as set out in the Project Document

c. A final statement of account in line with FAO Oracle project budget codes, reflecting actual final expenditures under the project, when all obligations have been liquidated.

3. These financial reports are prepared for review and monitoring by the budget holder of the project and the FAO GEF Coordination Unit.

4. Financial reports for submission to the donor will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement.

Report on Co-Financing

5. Within 60 days of the reporting period, FAO shall prepare a yearly co-financing report for the project for inclusion in the "project implementation report (PIR).which would include, to the extent possible, the following information:

1. Amount of co-financing realized compared to the amount of co-financing committed to at the time of project approval, and
2. Co-financing reporting by source and by type:
   - Sources include the agency's own co-financing (in-kind and cash), government counterpart commitments (in kind and cash); contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.
   - Types of co-financing. Cash include grants, loans, credits and equity investments. In-kind resources are required to be:
     - dedicated uniquely to the GEF project
     - valued as the lesser of the cost and the market value of the required inputs they provide for the project, and
     - monitored with documentation available for any evaluation or project audit undertaken by FAO.

6. With regards to reporting on in-kind co-financing provided by government and other institutions, FAO will encourage the partners to provide the information in a timely manner and the information will be made available upon request and without certification to the GEF Secretariat and GEF Evaluation Office.

Budget Revisions

7. Semi-annual budget revisions will be prepared in accordance with FAO standard guidelines and procedures.

Responsibility for Cost Overruns

8. The budget holder is authorized to enter into commitments or incur expenditures up to maximum of 10 per cent over and above the annual amount foreseen in the project budget under any budget sub-line provided the total cost of the annual budget is not exceeded.

9. Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget sub-line over and above 10 per cent flexibility should be discussed with the FAO GEF Coordination Unit with a view to ascertaining whether it will involve a major change in project scope or design. If it is deemed to be a minor change, the budget holder shall prepare a budget revision in accordance with FAO standard procedures. If it involves a major change in the project's objectives or scope, or in the project management budget, a budget revision and justification should be prepared by the Budget Holder for discussion with the GEF Secretariat.

10. Savings in one budget sub-line may not be applied to overruns of 10 per cent in other sub-lines even if the total cost remains unchanged, unless this is specifically authorized by the FAO GEF Coordination unit upon presentation of the request. In such a case, a revision to the Project Document amending the budget will be prepared by the Budget Holder.

11. Under no circumstances can expenditures exceed the approved total project budget or be approved beyond the NTE date of the project. **Any over-expenditure is the responsibility of FAO.**

Audit

12. The project shall be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

13. The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the governing bodies of the Organization and reporting directly to them, and an internal audit function headed by the Inspector-General who reports directly to the Director-General. Both functions are required under the Basic Texts of FAO which establish a framework for the terms of reference of each. Local audits undertaken by independent accounting firms of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices.

ANNEX 11: LEGAL CONTEXT

The present Agreement shall be governed by general principles of law, to the exclusion of any single national system of law.

Privileges and Immunities

Nothing in this Agreement or in any document relating thereto, shall be construed as constituting a waiver of privileges or immunities of FAO, nor as conferring any privileges or immunities of FAO on any other institution or its personnel.

Settlement of Disputes

The present Agreement shall be governed by general principles of law, to the exclusion of any single national system of law. Any dispute, controversy or claim arising out of or in connection with this Agreement or any breach thereof, shall, unless it is settled by direct negotiation, be settled by arbitration in accordance with the UNCITRAL Arbitration Rules in force on the date when this Agreement takes effect. The parties hereto agree to be bound by any arbitration award rendered in accordance with this Section as the final adjudication of any dispute.

Intellectual Property

All intellectual property rights in the work to be performed under this Agreement shall be vested in FAO, including without limitations, the right to use, publish, translate, sell or distribute, privately or publicly, any item or part of thereof.

Project Revisions

The following types of revisions may be made to this project document with the approval of FAO GEF Coordination Unit only, provided he or she is assured that the other signatories of the project document have no objection to the proposed changes:

1. Minor revisions that do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation. These minor amendments are changes in the project design or implementation that could include, *inter alia*, changes in the specification of project outputs that do not have significant impact on the project objectives or scope, changes in the work plan or specific implementation targets or dates, renaming of implementing entities, or reallocation of grant proceeds not affecting the project's scope.

2. Revisions in, or addition of, any of the annexes of the project document (with the exception of the Legal Context).

3. Mandatory annual revisions which rephrase the delivery of agreed project inputs or take into account agency expenditure flexibility.

All minor revisions shall be reported in the annual Project Implementation Review (PIR) report that will be submitted by FAO to the GEF Evaluation Office.

ANNEX 12: CO-FINANCING ARRANGEMENTS

National Co-financing Commitments

At the Appraisal Workshop that was held in June 2007, the BOBLME countries reconfirmed their in kind and cash contributions at the level that had been agreed at the Second Regional Workshop (Colombo, October 2004). **Their co-financing commitment letters are *attached*.**

National co-financing commitments amount to approximately US$5.7 million and consist of both cash and in kind contributions. The cash contribution from the countries would be US$2.2 million over five years, which amounts to US$275 000 per country over the life of the project, or US$55 000 per year for a five year life of project. These contributions cover:

(i) The cost of a full-time contracted national technical advisor (or national technical assistant) and secretary for the National Coordinator (NC);
(ii) The pro rata portion of the salary of the NC;
(iii) Associated communications and facilities costs for work on the project;
(iv) In-country costs associated with sponsoring project-related national workshops and the participation of national representatives. Of the US$55 000 annual country cash co-financing, it is estimated that US$24 000 per year per country over five years would cover the in-country costs of national workshops and national (not international) participants.

The contribution in-kind from the countries will be US$3.5 million over five years, which amounts to US$437 500 for each country over five years, or an annual in-kind contribution of US$87 500 per country per year. The in-kind contributions comprise:

(i) All national counterpart salaries for workshops, training and local travel, but not international travel;
(ii) Pro rata portion of the salary of the Project Steering Committee member(s);
(iii) Pro rata the time of the National Task Force members;
(iv) Pro rata costs of office space of the National Coordinator, national technical advisor/assistant and secretary;
(v) Pro rata costs of staff and consultant time to bring results of assessments and lessons learned from other complementary projects/initiatives which directly benefit the activities of the BOBLME project.

Bilateral and Other Donor Co-financing

Name of co-financier (source)	*Classification*	*Type*	*Amount ($)*	*%**
Norway	Donor Government	Grant	1,200,000	6.4
Sida	Donor Government	Grant	1,288,900	6.8
Sida	Donor Government	Other	9,522,500	50.4
NOAA	Donor Agency	In kind	400,000	2.1
BOBLME Governments	Recipients	Cash	2,200,000	11.6
BOBLME Governments	Recipients	In kind	3,500,000	18.5
FAO	GEF Agency/Executing Agency	In kind	800,000	4.2
PDF-B Co-financing	Donor, Recipient, FAO, other	Cash and in kind	1,200,687	
Total Co-financing			20,112,087	100%

ANNEX 13: GOVERNMENT OBLIGATIONS

1. The achievement of the objectives set by the project shall be the joint responsibility of the Government and FAO.

2. As part of its contribution to the project, the Government shall agree to make available the requisite number of qualified national personnel and the buildings, training facilities, equipment, transport and other local services necessary for the implementation of the project.

3. The Government shall assign authority for the project within the country to a Government agency, which shall constitute the focal point for cooperation with FAO in the execution of the project, and which shall exercise the Government's responsibility in this regard.

4. Project equipment, materials and supplies provided out of the project funds shall normally become the property of the Government immediately upon their arrival in the country, unless otherwise specified in the agreement. The Government shall ensure that such equipment, materials and supplies are at all times available for use of the project and that adequate provision is made for their safe custody, maintenance and insurance. Vehicles and personal computers remain the property of FAO, unless otherwise specified in the agreement.

5. Subject to any security provisions in force, the Government shall furnish to FAO and to its personnel on the project, if any, such relevant reports, tapes, records and other data as may be required for the execution of the project.

6. The selection of FAO project personnel, of other persons performing services on behalf of FAO in connection with the project, and of trainees, shall be undertaken by FAO, after consultation with the Government. In the interest of rapid project implementation, the Government shall undertake to expedite to the maximum degree possible its procedures for the clearance of FAO personnel and other persons performing services on behalf of FAO and to dispense with, wherever possible, clearance for short-term FAO personnel.

7. The Government shall apply to FAO, its property, funds and assets, and to its staff, the provisions of the Convention on the Privileges and Immunities of the Specialized Agencies. Except as otherwise agreed by the Government and FAO in the Project Agreement, the Government shall grant the same privileges and immunities contained in the Convention to all other persons performing services on behalf of FAO in connection with the execution of the project.

8. With a view to the rapid and efficient execution of the project, the Government shall grant to FAO, its staff, and to all other persons performing services on behalf of FAO, the necessary facilities including:

    i) the prompt issuance, free of charge, of any visas or permits required;
    ii) any permits necessary for the importation and, where appropriate, the subsequent exportation, of equipment, materials and supplies required for use in connection with the project and exemption from the payment of all customs duties or other levies or charges relating to such importation or exportation;

iii) exemption from the payment of any sales or other tax on local purchases of equipment, materials and supplies for use in connection with the project;
iv) payment of transport costs within the country, including handling, storage, insurance and all other related costs, with respect to equipment, materials or supplies for use in connection with the project;
v) the most favourable legal rate of exchange;
vi) assistance to FAO staff, to the extent possible, in obtaining suitable accommodation;
vii) any permits necessary for the importation of property belonging to and intended for the personal use of FAO staff or of other persons performing services on behalf of FAO, and for the subsequent exportation of such property;
viii) prompt customs clearance of the equipment, materials, supplies and property referred to in subparagraphs (ii) and (vii) above.

9. The Government shall deal with any claim which may be brought by third parties against FAO or its staff, or against any person performing services on behalf of FAO, and shall hold them harmless in respect of any claim or liability arising in connection with the project, unless the Government and FAO should agree that the claim or liability arises from gross negligence or wilful misconduct on the part of the individuals mentioned above.

10. The persons performing services on behalf of FAO, referred to in paragraphs 6 to 9, shall include any organization, firm or other entity, which FAO may designate to take part in the execution of the project.

ANNEX 14: PROJECT REVIEWS (STAP, GEF SECRETARIAT, GEF COUNCIL) AND TEAM RESPONSE

(a) STAP – INDEPENDENT TECHNICAL REVIEW AND RESPONSE OF THE PROJECT TEAM

The project team is grateful to the STAP reviewer for comments to strengthen the contents and presentation of this proposal. Presented below are the responses and/or actions taken, where required, taken in response to the STAP comments (in italic following the STAP comments).

Project reviewer: Dr. Loke-Ming Chou, Department of Biological Sciences, National University of Singapore.

KEY ISSUES

Introduction

The project aims specifically at protecting ecosystem health and managing living resources of the Bay of Bengal Large Marine Ecosystem (BOBLME). The main output is a Strategic Action Programme (SAP) detailing activities that should improve sustainable management of BOBLME over the long-term. The SAP will include a comprehensive framework with well-defined institutional and financial arrangements to ensure long-term sustainability of the programme itself so that the ultimate goal of a healthy BOBLME can be realized.

Central to regional strengthening of collaborative approaches and co-operation is the establishment of a Regional Coordinating Unit (RCU), considered necessary as none of the existing regional mechanisms is deemed appropriate in terms of mandate, geographical scope, and/or capacity to support an initiative based on a LME approach.

Activities will focus on two major threats which have been identified through preparatory phase consultations. These are living resource overexploitation and continued habitat degradation.

The programme is structured into five components, three of which deal specifically with resource management and environmental protection, and the remaining two with project management and sustainability.

Scientific and technical soundness of the project

The participating countries have, through the extensive regional and national consultations under the Block and Supplemental Block B grants, indicated a common desire for a healthy BOBLME. Its resources help support 400 million people inhabiting the Bay's catchment area. Sustainable exploitation requires a good understanding of the Bay's ecological functions and processes, strengthened national and regional management capacity and efficient coordination.

Component 1: Strategic Action Programme.

Subcomponent 1.2: BOBLME Institutional Arrangements.

A properly defined institutional mechanism should be established in the early phases of the project so that accountability can be maintained from the start. Participating countries should agree to a permanent institutional arrangement as early as possible, rather than have this developed halfway or towards the end of the first phase.

***Response by the project team**: The project preparation team fully agrees with the recommendation. This has been an issue that has been discussed with and among the participating countries since the early stages of project preparation. To be honest, there was a lack of consensus on the exact nature and location of a permanent institutional mechanism to implement the Project. As a result, agreement was reached among the 8 participating countries that an "interim" regional coordination unit (RCU) responsible for project implementation should be established at the onset of the Project. It was also agreed that project resources would be provided to support a much more detailed institutional analysis as well as promote a series of national and regional consultative workshops designed to achieve the needed consensus prior to the establishment of BOBLME permanent institutional arrangements. The participating countries have agreed to a timetable calling for a decision no later than the end of Project Year 3. Depending on the nature of that decision and the potential budgetary implications, the possibility may exist of replacing the RCU with a permanent arrangement prior to the end of project's first phase. Finally, the existing situation provides an opportunity to allow for the emergence of other possible solutions which could facilitate reaching consensus among the participating countries (e.g., in the broadening of geographical representation and deepening of the mandate of the BOB Inter-governmental Organization).*

Subcomponent 1.3: Financial Sustainability.

This is crucial to long-term sustainability of any programme and any effort devoted to this aspect will be worthwhile. A sustainable financing mechanism should be agreed to and be able to sustain programme coordination at least, to ensure continuity and interest that can withstand the pulsating nature of aid agency funding.

***Response by the project team:** The team feels that this is a very important issue. Project subcomponent 1.3 specifically supports the establishment of a financially viable BOBLME. This subcomponent will support the: (i) design and establishment of a financing mechanism to fund the annual recurrent costs of the agreed BOBLME management structure ensuring the continued beneficial impact of the BOBLME programme; and (ii) assist BOBLME countries to prepare for the mobilization of financial resources and development of financial mechanism for implementing specific actions that will be developed, agreed and included under SAP.*

Subcomponent 1.4: SAP Preparation and Adoption.

The processes identified for developing the SAP are suitable; use of TDA and consultations with government, public stakeholders and partners to formulate the SAP should result in a product that addresses most needs.

Component 2: Coastal/Marine Natural Resources Management and Sustainable Use.

Subcomponent 2.1: Community-based Integrated Coastal Management.

There should be sufficient and varied experience across the region on community-based management with many valuable learning lessons that can be applied and replicated. This subcomponent is important for capturing the wealth of information and synthesizing the information for greater experience sharing. Similar activities in the East Asian Seas region have shown how community-based management of coral reefs and reef-related fisheries have been extended from the Philippines to Indonesia through information sharing and site visit exchanges. Replication of success is certainly to be encouraged and this activity should facilitate it.

Subcomponent 2.2: Improved Policy Harmonization

This subcomponent is important to ensure that policy processes and capacity for policy formulation are in place at local, national and regional levels. It will be more effective if the rural coastal community and the research community be given a more direct involvement equal to policy makers so that policy interventions are relevant and more acceptable to the coastal communities whose livelihoods can be improved through these policies. This is pertinent particularly to Objective 'ii', which promotes consolidation of selected policy recommendations to facilitate community-based ICM.

***Response by the project team**: We fully agree with the comments of the reviewer and feel that many of these concerns have been addressed in project design. The proposed policy studies identified under this subcomponent (which are described in more detail in documents in the project file), particularly Study 3 which focuses on community level policy and the respective sociological aspects, are designed to be fully participatory and inclusive in their completion. These studies in turn will provide a major input into identifying and formulating possible policy interventions. Similarly, the national workshops proposed under the subcomponent, both provide and have budgeted for a broad and diverse level of stakeholder participation including from the rural coastal and research communities. National workshops will also be attended by the national Project Steering Committees (PSCs) and National Task Forces (NTFs) members, some of whom will represent rural coastal communities. Workshop invitees will also include representatives from other stakeholder groups identified as appropriate (in terms of making and influencing policy), through the initial policy studies proposed above. It is expected to be particularly important to involve provincial and district officials, community representatives, and NGOs. These workshops will be one of the main means through which the Project will influence policy. Budget support has also been provided to strengthen capacity in local NGOs to work with coastal communities in participating and influencing local formulation of policies that affect their livelihood and wellbeing. Finally, project design has been kept flexible and provides opportunities for the countries to include additional policy studies and the wherewithal to act on policy recommendations if new priorities are identified during implementation.*

Subcomponent 2.3: Collaborative Regional Fishery Assessments and Management Plans.

It appears that shark fishery management to be addressed on a regional scale, and Hilsa and Indian mackerel fisheries management to be addressed at sub-regional levels have been evaluated as the most important target fisheries in need of collaborative trans-national efforts. This strategy of selecting a few species in urgent need of management is sound and practical. The question arises as to which fishing sector benefits most from the exploitation of these species and whether there are present conflicts between large-scale and small-scale operators at local and national levels that will make it enormously difficult and complicated to deal with at sub-regional and regional scales, keeping in view the PDO of enhanced food security and reduced poverty for coastal communities. The common fishery data/information system to be established will be useful for the management of transboundary species, but it is not clear if the intention is to restrict the database to transboundary species or to be all encompassing.

***Response by the project team**: The reviewer is correct in noting that the selected species are taken by both small and large-scale vessels in the BOBLME region. Similarly, the conflict between the small and large – scale operators is one of the main management issues in the region and will be addressed by the Project as it is a transboundary issue (common) in that all countries have the same issue. In light of the complexity of the issue, it was judged to be most practical to address it at a sub-regional level (Hilsa and Indian mackerel, respectively). Many management interventions are possible and the opportunity to learn form others is a major advantage (these could include zoning, gear restrictions, seasonal closures and/or setting up of protected areas or fish refugia). Specific measures will be identified through the establishment of regional and national fishery taskforces to include representatives from both sectors and the subsequent preparation of national and sub-regional fishery management plans. Better management in both sectors would benefit food security both through direct food/nutrition effects and through indirect effects of improved earnings and employment. With respect to the data/information system, the intention is to use the transboundary species as an initial means to promote more standardized and consistent data collection systems which can then be built on and applied to all species. The eventual long-term goal is to establish a more generic system for all countries in the future.*

Subcomponent 2.4: Collaborative Critical Habitat Management.

Activities of this subcomponent are broad and similar to establishing ICM programmes at two pilot sites, each involving two countries. The activities include development of a systematic monitoring programme but do not indicate specifically what is to be monitored. If monitoring focuses on critical habitats, then what aspects are to be included? It is assumed that the critical habitats will be monitored to track the effectiveness of public awareness raising, alternative livelihood creation and improved planning capacity. The two proposed pilot sites will make excellent case studies on the management of shared/migratory stocks and be well-connected to Subcomponent 2.3.

***Response by the project team**: Again the team agrees with the reviewer's observations. During project preparation there was not sufficient time to inventory all relevant data, sources and current monitoring programmes, including in the latter case, national monitoring programmes which might be adapted to the specific sites. However, major data gaps that were identified that need to be addressed to complete an environmental baseline at the sites include basic oceanographic parameters, fish larval patterns, presence and status of selected rare and endangered species, and the current regime under differing monsoonal conditions.*

However, while representatives from the countries' relevant main line technical agencies and marine laboratories participated actively in the preparation of this subcomponent, time constraints prevented a larger technical workshop with other stakeholders which will be needed to finalize a number of aspects of the subcomponent including the monitoring programme. Moreover, given the likelihood that the recent tsunami has adversely affected a number of coastal/near-shore marine habitats in the proposed sites, there may be a need to adjust both baseline priorities (e.g., a need to resurvey selected critical habitat) and monitoring parameters and activities. Project design has provided the flexibility to adjust to any changes in the baseline and monitoring programme resulting from wider consultation and/or a change in circumstances. Under the subcomponent, support has been provided for the creation and periodic meeting of technical bi-national operations task forces that will provide the means to address and finalize these issues. In addition, a series of data workshops have been budgeted for in the subcomponent to allow for researchers to coordinate, exchange, and interpret data from the participating sites. Regardless of possible changes needed to complete an environmental baseline and establish a monitoring programme, which will be finalized in Project Year 1, the monitoring of status and change of critical habitats (primarily, coral reefs, marine grass beds, and mangroves) will likely be parameters to be included in any monitoring plan supported under this subcomponent.

Component 3: Improved Understanding and Predictability of the BOBLME Environment.

Subcomponent 3.1: Improved Understanding of Large-scale Processes and Dynamics affecting the BOBLME.

This activity is relevant and useful to a better understanding of large-scale environmental processes and does not take much of the total project cost. The identification of information gaps will help to steer future efforts that will synergize existing information.

Subcomponent 3.2: Marine Protected Areas in the Conservation of Regional Fish Stocks

The activities proposed in this Subcomponent are directed at a more comprehensive approach to the establishment of Marine Protected Areas (MPAs) for more effective management of fisheries stocks, particularly migratory species. They are straightforward and consistent with similar initiatives to create MPA networks that are known to me. The previous Subcomponent will complement this to a large extent.

Subcomponent 3.3: Improved Regional Collaboration.

While participation in relevant activities and processes of the listed programmes/initiatives are to be supported, it is not clear what the level of involvement will be in order to ensure improved collaboration. Too often, participation is reduced to attendance at meetings of the other institutions, with collaboration restricted at best to mere information sharing. The budget for this component suggests that this is the proposed mode of collaboration for greater effectiveness; collaboration should extend to joint activities that capitalize on the expertise/resources of different institutions so that limitation of funds becomes less of an obstacle to moving ahead.

***Response by the project team**: Again the team agrees with the observation. It is the view of the team that the only way to achieve any significant impact on the "health" of a body of water as large and complex ad the Bay of Bengal, will be to work in a close and collaborative fashion with other regional and global programmes and projects in the Bay. That being said, identifying and negotiating these collaborative arrangements at the onset of project effectiveness, in the absence of well-established and recognized BOBLME institutional arrangements, constrains making substantial commitments in terms of resources at this time. Moreover, most of the project resources in Phase 1 are oriented towards foundation building with more substantial field activities likely to take place in the second and subsequent phases of the BOBLME Programme. Furthermore, based on an initial evaluation of other relevant initiatives in the region, there remains a certain level of uncertainty with respect to their own status and next steps (e.g., GIWA). Finally, it was felt that there would be some difficulty in justifying the blocking of resources during this phase of the BOBLME Programme for use in collaborative activities to be defined later in Project implementation. Despite these considerations, there have been a number of informal discussions with regional institutions with respect to possible roles in support of project implementation (ref. regional sub-contractors in the institutional arrangements proposed under the Project). These will be further defined in Project Year 1. In short, as the reviewer has correctly said, the focus of the 1st phase is to establish a permanent institutional arrangement in support of BOBLME objectives. In light of this priority, the team felt it was logical to provide the wherewithal to enable the regional coordinating unit (RCU) to reach out initially through attending of meetings and other similar mechanisms to more fully understand the range and nature of existing initiatives during the foundation building process. This in turn will provide a basis for building a more substantive collaborative approach in subsequent phases of the Programme where field activities will become a much more significant part of project supported activities..*

Subcomponent 3.4: Establishment of a Geo-reference Data Base.

This activity is essential to permanently archive the huge quantity of information to be generated from the programme. Information retrieval will be facilitated and the production of regional data products will give participating countries a good sense of ownership and the benefits of participation.

Component 4: Maintenance of Ecosystem Health and Management of Pollution.

Subcomponent 4.1: Establishment of an Agreed to Ecosystem Indicator Framework.

Environmental health indicators are important tools for managers. While water quality indicators are much established, ecological indicators that measure habitat quality are comparatively less defined or accepted. Still it will be a useful exercise if such indicators are developed for the region. Water quality criteria have been developed and adopted by the Association of South East Asian Nations (ASEAN) and can be considered by BOBLME nations, four of which belong to ASEAN.

Subcomponent 4.2: Coastal Pollution Loading and Water Quality Criteria.

This Subcomponent is timely and necessary to the SAP. A strong regional capacity to address marine pollution will contribute to a healthy BOBLME.

Component 5: Project Management.

Subcomponent 5.1: Establishment of the RCU.

This Subcomponent is estimated to take up 22.5 percent of the project funding. It is a major expenditure and should be considered carefully. Various alternatives to the establishment of an entirely new RCU were considered but analyzed to be unsuitable. There are advantages and disadvantages to setting up a new coordinating structure. These will have to be examined in greater detail and the final decision should be supported with stronger and more convincing justifications, including a cost-benefit analysis.

***Response by the project team**: The team has been highly sensitive to this issue throughout the preparation process. As might be expected from a Programme encompassing activities in eight countries with a considerable emphasis on, monitoring, evaluation and information dissemination, the cost of the project management component is significant (over 20 percent of the total). One factor which contributed to increased cost was a decision to increase project implementation from five to six years. Nevertheless, this is viewed as both warranted and realistic for a programme as complex as the BOBLME. Another factor contributing to cost is the inclusion of national counterpart management and coordination costs. In terms of the costs themselves, salaries and travel make up the greatest percentage. The number of expatriates (which may all be recruited from the region) have been cut to the minimum needed to ensure a technically sound RCU and still be able to call the BOBLME a regional project (3). Similarly, the travel budgeted for an eight country regional project is not viewed as excessive. Finally, it should be noted that the countries have contributed significantly in both cash and in-kind, particularly India as host country, in covering the partial costs of the subcomponent. Although careful attention was given to assessing alternative management structures, it should be stressed that there is no existing institutional structure within the region capable of taking on this role. The structure established for the purposes of implementing the PDF-B retains only a single national staff member at this time. Among the alternatives evaluated were: (i) incorporating BOBLME management within the Chennai-based BOBIGO; (ii) basing the management unit at FAO Regional headquarters in Bangkok; and (iii) basing the management unit within one of the regional fisheries or coastal research organizations. It was concluded that although the BOBIGO might offer a long term sustainable solution to BOBLME management, the current restricted membership (only three of the eight participating countries) render it infeasible as a host at this time. The utilization of FAO offices, while reducing initial investment costs, would do little to cut annual operating budgets and would risk significantly reducing the role of participating national countries in management and hence long term sustainability.*

Subcomponent 5.2: Monitoring and Evaluation System.

This is certainly necessary to ensure that project targets are met and progress is as planned. The proposed activities are relevant.

Subcomponent 5.3: Project Information Dissemination System.

This Subcomponent is as important as the previous.

Identification of the global environmental benefits and/or drawbacks of the project.

The benefits will be a healthier and better managed BOBLME where improved sustainability will contribute to poverty alleviation of rural coastal communities and enhanced food security. The drawbacks include the lengthy process to develop an effective regional mechanism and acceptance by various stakeholders, but it has to start sometime. The project brief (p.2, 3rd paragraph) states that a critical barrier to addressing the key issues of unsustainable harvesting and habitat degradation is the weak and/or inappropriate policies, strategies and legal measures that characterize much of the region. "Where these do exist, they are rarely enforced". How confident can we be of situation improvement resulting from better policy formulation when the present weakness of enforcement and/or surveillance remains unaddressed?

Response by the project team*: It is the team's view that sound policies are a prerequisite to improved surveillance and enforcement. It makes little sense to support increased enforcement capacity if what is being enforced is non-sustainable. It is felt, with strong support from the countries, that project support for a thorough review of "lessons learned" in the region, coupled with increased awareness among decision-makers and rural fisher communities alike, provides a sound basis for beginning to get the policies "right." This will be further supported, by the establishment of a data portal designed to facilitate information exchange within the region, initially focusing on fishery legislation and policies and, dependent on its success, broadening the portal to include information and data relevant to other Project-relevant themes. Finally, project resources have been provided to promote the pilot the implementation of new policies where opportunities arise and the countries are in agreement. Once the "right" policy framework is in place, greater emphasis can be focused on increasing the efficacy of their implementation, most likely in the programme's 2nd phase where field activities are more likely to predominate. Finally, despite the emphasis on foundation building in this initial phase of the programme, there are a number of field oriented pilot activities (e.g., preparation and implementation of regional and sub-regional fishery management plans, sub-regional management of transboundary critical habitat, and pollution "hotspot" monitoring). Where monitoring and enforcement are identified as major constraints in these activities, it is expected that project resources would address these issues as warranted.*

How the project fits within the context of the goals of GEF, as well as its operational strategies, programme priorities, GEF Council guidance and the provisions of the relevant conventions.

The project is highly relevant to GEF goals. The performance indicators have been selected to reflect environmental quality improvement, enhanced capacity of participating countries, an effective collaborative mechanism and poverty alleviation.

Regional context.

The project includes all the countries around the large marine ecosystem of the Bay of Bengal and the regional context is relevant and well defined.

Replicability of the project (added value for the global environment beyond the project itself.

The institutional framework model that will be developed can certainly be replicated and applied to other LMEs. The project itself has pilot sites for the demonstration of sub-regional and bilateral arrangements and these in themselves can be replicated across BOB.

Sustainability of the project itself.

The development of the collaborative mechanism is a confidence-building measure that will increase resolve among participating countries to manage and improve the environmental quality of the Bay. Progress and success of initial activities will help to maintain interest that should contribute to project sustainability.

SECONDARY ISSUES

Linkages to other focal areas.

The project covers many of the main issues linked to ICM and LME management. It should help countries to meet with commitments to international conventions and agreements dealing with the marine environment.

Linkages to other programmes and action plans at regional or subregional levels.

There are many programmes and initiatives operating in the Bay of Bengal and functional linkages with these are important if action is to be synergized and overlapping activities minimized.

***Response by the project team**: We fully agree and have attempted to reflect that in project philosophy and design. See remarks under subcomponent 3.3, above.*

Other beneficial or damaging environmental effects.

The project has only beneficial effects to the environment. No damaging effects on the environment are apparent except for delays in project implementation.

Degree of involvement of stakeholders in the project.

There is a high degree of engagement with various stakeholders and a consultative approach is adopted in the project. There is a lot of consensus building involving stakeholders.

Capacity-building aspects.

When adopted and established by participating nations, the regional mechanism will increase the capacity of these countries to manage the marine environment more effectively and improve capability to address transboundary issues.

Innovativeness of the project.

There is not much in the way of innovation. Models exist elsewhere on the process of developing a regional mechanism for improved management of a large marine ecosystem. None is in place for the BOBLME.

Response by the project team*: We fully agree. A major factor which influenced project design, supported with very explicit guidance from the participating countries, was not to place the focus and budget of the Project on promoting new, innovative approaches to manage the BOBLME and its resources. Rather it was to consolidate the already large and diverse experiential data base that exists throughout the region, distil relevant "lessons learned" and support its further replication and deepening in the BOB area. Further, while the creation of a regional approach to managing the BOBLME in itself may not be considered particularly innovative, the establishment of a well-recognized and appropriate institutional arrangements to facilitate a regional approach among the countries to address transboundary issues was felt by most to be the highest priority. Finally, while arguably not particularly novel, Project support for the promotion of collaborative approaches among two or more countries to address critical protected areas, transboundary fish stock management, common environmental health protocols and pollution monitoring will be new to the region.*

ADDITIONAL REMARKS

It is already accepted that regional approaches are necessary for the management of the marine environment and to cope with its open and interconnected nature. Regional collaboration not only improves capacity to address transboundary issues, but also enhances management at national and local levels. Effective regional mechanisms can help to facilitate sharing of responsibilities and improve surveillance and enforcement across territorial boundaries, reducing helplessness at national levels against, for example, foreign poachers. Such a network will strengthen management throughout the region.

The recent Asian tsunami disaster provides a clarion call for the strengthening of regional co-operation. If already established, the regional institutional set-up can help to rehabilitate the thousands of displaced and affected fishers who survived the calamity. Even without natural

disasters of such unprecedented magnitude, the rates of habitat degradation and fisheries resource depletion are sufficiently serious to warrant immediate attention.

Response by the project team:. *During the preparation of the FTDA, the occurrence of natural hazards generally and tsunamis specifically, were not identified as a priority. This situation changed dramatically on 26 December 2004. We fully appreciate the magnitude and gravity of the recent tsunami on the peoples of the region and spent a good deal of time, given the project objectives, potential funding source, and status of project preparation, on how best to respond. As a result, the BOBLME proposal, which had been prepared and endorsed by the countries pre-tsunami, was reassessed to ascertain where meaningful and compatible contributions could be made in a timely manner. A number of opportunities in the proposed Project were identified which could easily be adapted to reduce vulnerability in rural coastal communities to natural hazards (for example by support for vulnerability mapping and improved local use planning in the Project's GIS and Policy formulation subcomponents, respectively). An important additional need was identified, namely to establish a new, post-tsunami environmental "baseline" which has now been included under the TDA subcomponent through a comprehensive assessment of critical coastal habitats. This will provide a key input into other on-going and proposed coastal community and livelihood assessments to ascertain impacts on future income and well-being of affected populations. Finally, dependent on the priorities of the countries, there could be the possible inclusion of a second tier Early Warning System (EWS), designed to expedite the transfer of hazard relevant information from national information nodes (typically located in the capital cities) to vulnerable rural coastal communities. In light of the number of current activities and the rapidly changing situation in the tsunami-affected areas, flexibility has been built into the Project so as to allow further definition of BOBLME-supported activities as the situation evolves. What is important, however, is early action on the approval of the Project to ensure that BOBLME plays a meaningful role in the future assessment and rehabilitation and management effort. An operational BOBLME would also provide the framework of an ecosystem approach and sustainable fisheries management, a framework in which many donors that are providing emergency and rehabilitation relief are interested in collaborating. Once approved and operational, a regional workshop proposed under the TDA subcomponent (subcomponent 1.1) would provide a means to better assess how the Project can better contribute to other on-going and planned activities.*

Project implementation.

The process and mechanism are clearly outlined. Support from the participating countries is important to the successful implementation of the project and this has already been demonstrated in the project's preparatory phase.

Project future.

Much depends on the commitment of participating countries. This again has already been demonstrated in the preparatory phase with countries contributing in cash and kind to the development of the project proposal.

(b) GEF SECRETARIAT COMMENTS AT WORK PROGRAMME ENTRY AND RESPONSE OF THE PROJECT TEAM

Programme Designation and Conformity: For consistency with strategic priorities in the focal area in addressing the key portfolio gaps such as depletion of fisheries, the countries should be asked whether they would like to include as an objective of the project moving forward the WSSD targets for 2010 (ecosystem approach) and 2015 (sustainable fisheries). Consistent with the strategic priorities, GEF would welcome this objective to show responsiveness to WSSD targets.

Response by the project team: *The WSSD 2002 Plan of Implementation placed special emphasis on four issues of particular relevance to the BOBLME Programme. These are:*

- *the development and implementation of national and regional Plans of Action to put into effect the International Plans of Action (IPOAs) on Illegal, Unreported and Unregulated Fishing by 2004 and on fishing capacity by 2005 (#30d);*
- *the application of the ecosystem approach by 2010 (#29d);*
- *the restoration of depleted stocks by 2015 (#30a); and*
- *the establishment of "representative networks" of marine protected areas by 2012 (#31c)*

The Plan also identified a number of actions in the area of institutional policies, including strengthening of regional cooperation and coordination, particularly among regional bodies (#29f). The Plan furthermore expressly recognised the role of FAO and referred explicitly to the Code of Conduct and its related International Plans of Action (IPOAs) and guidelines.

The overall objective of the Project is to promote an ecosystem approach to managing the Bay of Bengal resources on a sustainable basis. This would be accomplished through the development and implementation of a SAP whose implementation would lead to enhanced food security and reduced poverty for coastal communities in BOB region. In addition, the countries' priority concerns, as identified and reconfirmed at every regional meeting, is the overexploitation of living marine resources (particularly IUU) and the destruction of critical habitats, and the need to manage them on a sustainable basis. Components 2 and 3 have therefore been designed with a view to addressing these priority concerns, creating an enabling policy environment, and promoting, inter alia, the development of regional fishery management plans and collaborative management of critical habitats (fish refugia, marine protected areas).

The proposed BOBLME Programme furthermore addresses the Millennium Development Goals (MDGs) related to eradication of extreme poverty (#1a), eradication of extreme hunger (#1b), and ensuring environmental sustainability (#7), including integrating the principle of sustainable development into country policies and programmes and reversing the loss of environmental resources.

Stakeholder Involvement: Stakeholder involvement plan should be produced by time of work programme inclusion.

Response by the project team: *A Stakeholder Involvement Plan can be found in Attachment 1 of* ***Annex 10*** *of the Project Brief. As discussed in Section 3(d) of the Project Summary Document, stakeholder participation is central to the design and implementation of the*

project. Annex 12 to the Project Appraisal Documents provides a chronology of stakeholder participation during the preparation of the project. Stakeholder participation during preparation occurred through participation in national consultations and workshops, meetings of the national task forces, the development of national reports, regional meetings and technical workshops and meetings of the Project Steering Committee. Selected documentation has been posted on the BOBLME dedicated website. During project implementation, stakeholder participation in all project components is included at varying levels of intervention. At the community level, local participation is specifically identified and costed as a key input into the: (i) "stocktaking" activities (subcomponent 2.1); (ii) local capacity improvements as part of policy "mainstreaming" (subcomponent 2.2); development of all project-supported fishery management and critical habitat plans (subcomponents 2.3 and 2.4, respectively); and (iv) case studies and development of guidelines associated with assessing the role of fish refugia in the management of fish stocks in the BOBLME (subcomponent 3.1). Consultations at the national level will be ensured through the creation of Project-wide National Coordinators and Project Task Forces. National consultations are the "heart" of the processes leading to the finalization of BOBLME institutional arrangements (1.2) and the development of an agreed SAP. Additionally, specific national consultations have been included and costed as workshops (subcomponent 2.1), national fishery task forces (subcomponent 2.3), and commissions (subcomponent 2.4). Finally, at the regional level there are a large number of workshops and consultations which will be supported across many of the components as well as the Project-wide regional collaboration supported under the Improved BOBLME "predictability" -component (component 3) and information dissemination subcomponent (subcomponent 5.3).

Monitoring and Evaluation: Inclusion of M&E plan with indicators of results.

***Response by the project team*:** *Annex 3 of the draft Project Brief provides specific details of the (i) Results Framework and Monitoring, (ii) Arrangements for Results Monitoring and (iii) A Monitoring Plan, with specific results indicators for each component, baseline, targets, frequency of monitoring, monitoring instruments and responsible persons/institutions for data collection, and detailed discussion of monitoring and evaluation arrangements and arrangements for dissemination of results. The intent is to also consider the possibility of including an assessment of the condition of the coral reefs and other coastal and marine habitats, in collaboration with the Global Coral Reef Monitoring Network, in the countries affected by the tsunami to establish a new baseline.*

Financing Plan: Co-finance identified at work programme entry.

Response by the Project Team: *The status of co-financing arrangements for the project is provided in Section 4 of the Project Executive Summary. In terms of country contributions (in cash and in kind), the amounts indicated in the table in Section 4 were proposed by the countries at the Second Regional Workshop in Colombo in October 2005, and will be confirmed by their respective governments by the time of CEO endorsement. NOAA and FAO have confirmed their support for the project. The draft Project Brief was transmitted on 22 December 2004 (pre-tsunami) to around 20 potential donors, including those who have supported the PDF-B process (Sida, NOAA, Japan), as well as to previous donors of the Bay of Bengal Programme (BOBP). Since the tsunami, a number of donors have been in contact with FAO for further information on the proposed BOBLME Programme. While many donors are committed to providing emergency relief and rehabilitation assistance, they have expressed their interest in working within a framework that promotes an ecosystem approach. While firm US$ commitments have not yet been made at this time, the WB and FAO would provide commitments in writing by the time of CEO endorsement.*

General Comments: As with all IW projects, expect that a component would be included for developing a website for the project, displaying assessment information such as TDA and agreed actions such as SAP on the site. The site should be established consistent with guidelines from IWLEARN and the project should include funding to actively participate in IWLEARN activities and the IW Biennial meetings.

Response by the project team: *The BOBLME has already a dedicated website (http://www.fao.org/fi/boblme/website/index.htm). Component 5.3 of the project includes support for building and further strengthening the website. This website will help disseminate information to regional and global stakeholders relevant to BOBLME and the BOBLME Programme. The project team will communicate with IW:LEARN IT staff early to ensure that the project website is consistent with IW:LEARN guidelines content and links for GEF-IW supported projects. The project includes support for hosting learning exchanges associated with the BOBLME through the IW:LEARN website and supporting participation in IW:LEARN supported and other relevant meetings.*

(c) WORK PROGRAMME COMMENTS FROM GEF COUNCIL AND RESPONSE OF THE PROJECT TEAM

USA

Consistent with U.S. legislation on Burma, the U.S. objects to this project because it benefits Burma, and asks that this position be clearly reflected in the CEO's summary.

Response by the project team. *Project activities in Myanmar will be carried out in accordance with the UN General Assembly resolution which governs UN activities in Myanmar and with the guidelines and decisions of GEF and the bilateral donors providing co-financing to the project.*

Germany

1. **The success of the project depends on the commitment of the participating countries. It is important for reasons of sustainability to make sure, that the participating countries permanently contribute to the project.**

Response by the project team: *FAO agrees with this recommendation. While there is no guarantee that participating countries will permanently agree to contribute to the programme, much of what is proposed for support under component 1 is designed to ensure to the extent possible, this outcome will be achieved. Specifically, relevant activities proposed for support under the 1st phase project include: (i) reaching agreement on and the subsequent establishment of permanent institutional arrangements to facilitate the long-term management of the BOBLME; (ii) development of the foundation and means to generate a stable source of funding to support, at least on a partial basis, the financing needed to implement the Strategic Action Programme (SAP); the "roadmap" laying out the needed actions over the medium to long-term to achieve a "healthy" BOB; and (iii) a process leading to political "buy-in" of the SAP culminating in ministerial-level endorsement of the Action Programme in the Project's fifth year. Despite these activities, permanent support for the SAP ultimately rests on the continued relevance of the Programme. FAO fully recognizes that critical to ensuring a long-term commitment (both politically and financially) on behalf of the participating countries of the region will be a Programme that continues to be relevant over time and space and meets both national and regional interests and needs. This will require continued and active consultation with all stakeholders, ever closer cooperation and collaboration with other relevant initiatives in the region and finally, sound and competent management.*

2. **Elaborate on the linkage of the project to related projects within the BOBLME region to synergize and minimize overlapping activities**.

Response by the project team: *FAO agrees with the recommendation. As highlighted in Annex 1 (country and sector background) of the project document (prodoc) FAO acknowledges the presence of a number of other relevant sub-regional, regional and global initiatives in the BOBLME. But these (and others) should be viewed as assets rather than as potential problems faced by the project. Moreover, the project document is clear in its recognition that it would not be possible for either the 1st phase project or the longer-term programme to address all the environmental problems that affect the BOBLME. No single project or programme could address the range, magnitude and complexity of issues that characterize the BOBLME. The only logical approach is to work with existing institutions and activities in the region, particularly in promoting the exchange of data and information, experiences and "lessons-learned" and capacity building to achieve any lasting and significant impact. To that end the challenge then is to identify and avail of opportunities for cooperation and collaboration with these and other initiatives while working towards the reduction of potential duplication and overlap. In project design, it is felt these two objectives, increased collaboration and reduction of risk of overlap, would be achieved through: (i) active participation in promoting increased coordination and collaboration with other regional and global initiatives working in the BOBLME (component 3.3); (ii) the development of an agreed set of regional actions leading to a "healthy" BOBLME through the SAP (component 1.4); (iii) supporting regional studies that address critical data gaps preventing the achievement of a better understanding and predictability of the BOBLME environment (component 3.1); (iv) establishing a regional working group for marine*

protected areas (component 3.2); and (v) development of a regional approach to develop fishery management plans for selected fisheries (component 2.3). Finally, it should be emphasized that FAO's participation in a number of regional and national fisheries bodies in the region would facilitate inter-institutional coordination.

3. **Make sure that permanent, financially sustainable institutional arrangements survive in a region that is characterized by inappropriate policies, strategies and legal measures**.

Response by the project team: *Again FAO agrees with the recommendation. Much of the concern is addressed under the response to the first recommendation above. It is important to note that there is only so much that a regional project can do to influence national policies, strategies and legal measures. Nevertheless, the proposed project has attempted to address this issue through development of a wide and deep network of institutional arrangements, promotion of collaborative activities with other regional bodies and public awareness and information dissemination activities. Specifically, the project will inform key decision makers through ensuring high level participation in the SAP formulation and adoption process; the latter at the ministerial level. Moreover, promoting improved policies and strategies in support of programme goals and objectives are addressed through: (i) promotion of regional approaches to the management of selected fish stocks (component 2.3), (ii) improved policy harmonization (subcomponent 2.2) and (iii) support for regional policy meetings and strengthened capacity.*

Switzerland

a. **A thorough internal project review should take place after the first project year to allow for possible corrective actions and/or adaptations**.

Response by the project team: *FAO agrees to the recommendation. The BOBLME project preparation process has had a long gestation period due to a number of factors not least of which was the December 26, 2004 tsunami just prior to project submission to the February 2005 Inter-sessional Work Programme. While there is little reason to believe that any of the key issues and priorities have changed significantly since the Council approved the project in early 2005, nevertheless time (and events) have occurred in the region that need to be reflected in project design; a view shared with all the participating countries. This in part, has been addressed in the widespread support for a regional inception workshop immediately following CEO endorsement of the project. At that time, project activities will be revisited with the countries. It is envisioned that a major recommendation stemming from the workshop will be to take stock of the existing situation in the BOBLME, identify and evaluate what has changed since the project was approved by the Council and update project activities to reflect the existing reality. This will be a key task of the RCU working closely with national counterparts and provide the basis for recommendations to be presented to the joint PSC/annual review meeting scheduled at the end of PY 1.*

b. Utmost importance must be attached to the establishment of a comprehensive data base, which needs to be verified on all available evidence.

Response by the project team: *FAO agrees to this recommendation. The development of the data base, building on previous work done in project preparation in the development of a*

Framework Transboundary Diagnostic Analysis (FTDA), will be part of the finalization of the TDA (component 1.1). Other sources contributing to the data base would include: (i) inputs from the SAP process (component 1.4); (ii) ICM stock-taking exercise (component 2.1); (iii) data collection in support of fishery management plans for shark, Indian mackerel, and Hilsa fisheries (component 2.3); (iv) an inventory of data sets on large-scale oceanographic and ecological process affecting BOBLME living resources (component 3.1); and (v) inventorying and updating of status of existing MPAs in the region (component 3.2). The data base will be facilitated by the contracting of a monitoring and information specialist in the Regional Coordinating Unit (RCU).

3. **The second project phase should be defined no later than end of Year Three.**

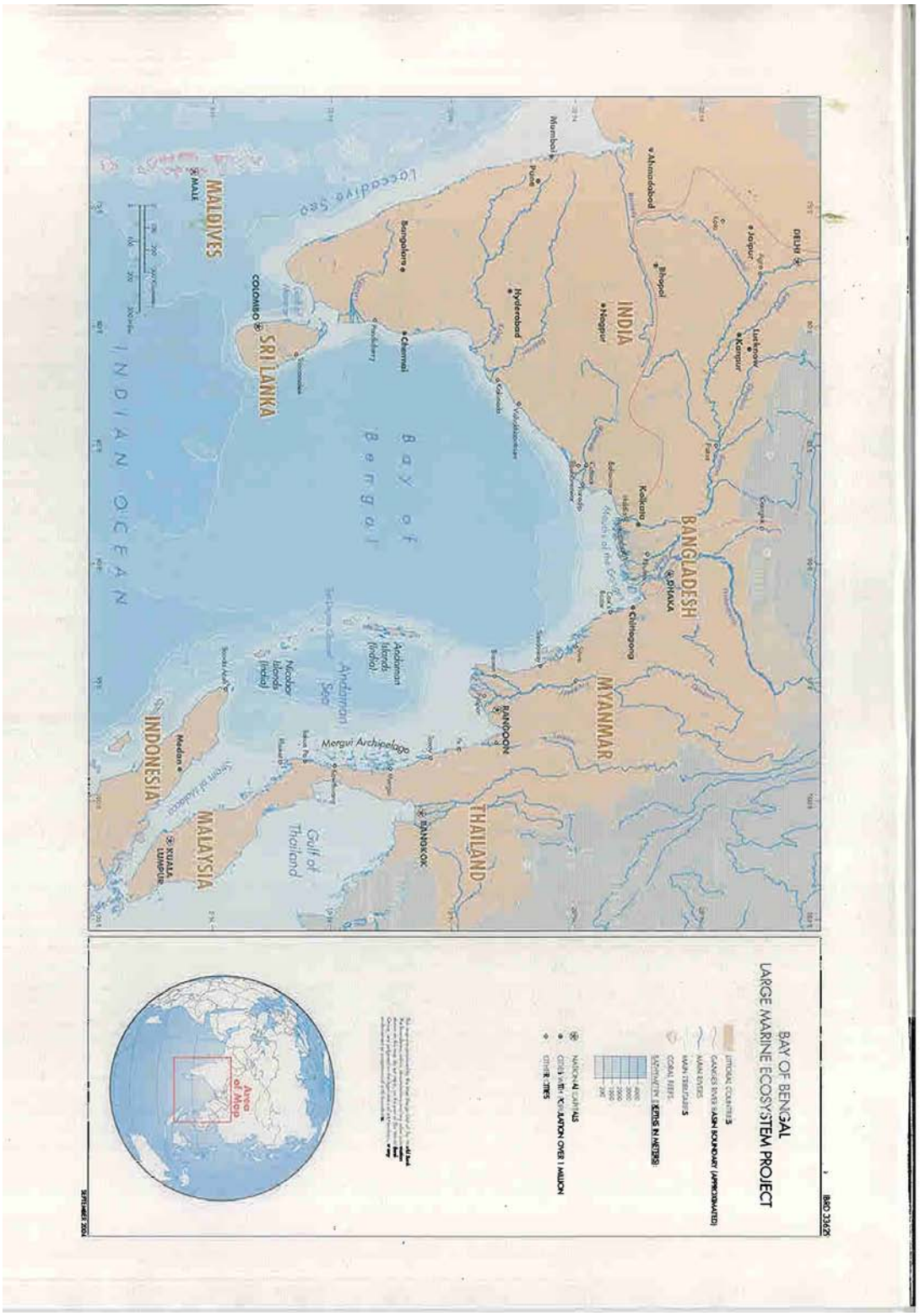
Response by the project team: *FAO agrees in part with the recommendation. Much of the programme's subsequent phases will be defined by the Strategic Action Programme (SAP). The formulation of the SAP which includes submission and adoption at a ministerial conference projected in PY 5, is a process that will be initiated in PY 1with the creation of the National SAP teams. This proposed process, which incorporates past experiences in SAP preparation and current best practices, is unlikely to result in a full defined 2nd project phase by the end of PY3, at least one that has the necessary political buy-in from the 8 participating countries. Nevertheless, it is expected that much of what would likely be included in a second phase would be known both through experiences and lessons-learned generated during the first three years of project implementation. These will be identified and evaluated through the project's mid-term evaluation (MTR). The MTR will be the main instrument to assess what has been achieved (or not) in the first half of the project and in turn, recommend how best to adjust the project approach and design (if required) during the remaining life of the project to achieve the stated goals and objectives. The MTR will provide critical insight into the future of the project and inputs into the SAP which will determine the programme's 2nd phase.*

4. **Parallel with point 3 above, concrete actions/ remedial measures should be defined in the form of pilot projects. Some of these should in turn be implemented during the first project phase, in order to gain valuable experience. Concrete pilot projects may prove to be very beneficial, especially if they are designed and executed during the advanced stages of investigation and planning phase**.

Response by the project team: *FAO agrees in general with the recommendation. Many of the activities proposed and designed for the 1st phase were designed to generate the necessary experiences and insights that could be scaled-up in the programme's 2nd and subsequent phases; the only practical approach to achieve any significant impact in a water body as large and complex as the BOB. In the project document, Table 2 attempts to demonstrate the linkages between technical activities and how they inform the development of the SAP, the key instrument to facilitate scaling-up in the programme's next phase. Pilot activities include support for the development of collaborative fisheries management plans (component 2.3) and MPA as fish refugia (component 4.2). Nevertheless, there are certain situations where pilots may not be the best means, at least at this point and time, to achieve the desired*

outcome. For example, in the case of community-based coastal resources management (component 2.1), it was the countries shared view that no more pilots were needed in the region. Rather stock taking and assessment were what was required and that in turn would provide the basis for future scaling up. In other cases, the issue was of sufficient complexity and magnitude that a significant amount of ground work would be required a priori to supporting even a pilot approach as is the case of regional coastal pollution monitoring(component 4.2). Finally, in the case of MPAs a mixed approach has been agreed to by the countries. While there are some pilot activities associated with the use of MPAs as fish refugia proposed during the project, the countries felt there was sufficient information to initiate upscaling reflected through the preparation of a follow-on GEF project during the life of the project (component 3.2).

ANNEX 15: MAP


BAY OF BENGAL
LARGE MARINE ECOSYSTEM PROJECT
INDIA
BANGLADESH
MYANMAR
THAILAND
SRI LANKA
MALDIVES
INDONESIA
MALAYSIA
Bay of Bengal
INDIAN OCEAN
Andaman Sea
Gulf of Thailand
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