UNDP Project Document

Governments of Cambodia, Indonesia, Lao PDR,
Philippines, PR China, Thailand, Timor Leste, and Vietnam
and
United Nations Development Programme
with the
Governments of Brunei Darussalam, Japan, RO Korea and Singapore
participating on a cost-sharing basis

Implementation of the Sustainable Development Strategy for the Seas of East Asia

The geographic scope of the project is the six large marine ecosystems (LME's) of the East Asian Seas and their associated watershed areas.

The project's objective is to facilitate implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), as adopted by East Asian countries in December 2003, through the mobilization of the necessary partnership arrangements, operating mechanisms, intellectual capital, support services and resources for the achievement of their shared vision of sustainable use of coastal and marine resources of the region and the development targets of the WSSD Plan of Implementation and that of the UN Millennium Development Goals (MDG). The project contributes to the key indicators of the GEF IW Strategic Objective (b), by fostering the development and implementation of required policy reforms, institutional arrangements, core partnerships and capacities in support of SDS-SEA implementation. The project also contributes to IW Strategic Programmes a) Depletion of coastal and marine fish stocks and associated biological diversity, and b) Nutrient over-enrichment and oxygen depletion from land-based pollution of coastal waters in Large Marine Ecosystems. Additional indicators to be supported include: improvements in fish stock and coastal habitat achieved; community livelihoods sustained and access to fish for artisanal fishers secured; multi-agency partnerships for action developed; quantifiable pollution reduction through institutional reforms, increased enforcement, and demonstration investments; multi-agency partnerships developed and catalyzing replication of reforms and investments; reduction of risks to human health from untreated sewage and community livelihoods improved in demonstration areas.

The implementation of the SDS-SEA will be a significant test of multi-stakeholder collaboration, coordination and capacity enhancement, in order to achieve practical and affordable solutions to recognized marine and coastal environmental problems at the local level, and to accelerate on-the-ground implementation measures to reduce pollution, as well as to restore and conserve marine and coastal resources at the national and regional levels. To this end, the newly formed EAS Partnership Council, PEMSEA Resource Facility, and triennial EAS Congress and Ministerial Forum will be fully operationalized and improved as viable vehicles for the long-term, sustainable implementation of the SDS-SEA. Core operational activities will focus on strengthening national programs for scaling up ICM across the region, targeting 20% coverage of the region's coastline by 2015, as well as facilitating ecosystem-based management programs in four pollution hotspots through national coastal and ocean policy development, strengthening local governance, and implementation of WSSD and MDG target-oriented strategic action programs.

The project is the Regional Component of a "two-project" package being submitted to GEF Council for approval, namely the UNDP/GEF project on Implementation of the SDS-SEA and the WB/GEF Partnership Investment Fund for Pollution Reduction in the LMEs of East Asia (i.e., the Investment Component). A Strategic Partnership among GEF, World Bank, UNDP and PEMSEA will be focused on accelerating investments in pollution reduction facilities and services, through the development, implementation, demonstration and replication of innovative policies, procedures, technologies and financial and economic instruments that help to overcome barriers to investment by the public and private sectors.

The duration of the project is 10 years, consisting of a transition period (2007-2010), a transformation period (2010-2013), and a sustainable operation period (2013-2017). The first three years are the focus of this Project Document. However, an outline of the 10-year transformation process, complete with targeted outputs and outcomes, has been included.

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List of Acronyms

AOE	Area of Excellence
BOD	Biochemical Oxygen Demand
CI	Conservation International
COBSEA	Coordinating Body for the East Asian Seas
CSA	Cost-sharing Agreement
EAS	East Asian Seas
EARL	East Asia Response Limited
EBM	Ecosystem-based management
FAO	Food and Agricultural Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIWA	Global International Waters Assessment
GPA	Global Plan of Action
HAB	Harmful Algal Bloom
IBRD	International Bank for Reconstruction and Development
ICM	Integrated Coastal Management
IDA	International Development Association
IFI	International Financial Institution
IIMS	Integrated Information Management System
IGR2	Second Intergovernmental Review
ILO	International Labor Organization
IMO	International Maritime Organization
ISO	International Standards Organization
IT	Information Technology
IUCN	International Union for the Conservation of Nature (World Conservation Union)
IUU	Illegal, unreported and unregulated fishing
IW	International Waters
IW:LEARN	International Waters Learning Exchange and Resources Network
LME	Large Marine Ecosystem
LOI	Letter of Intent
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSP	Medium-Sized Project
N	Nitrogen
NCC	National Coordinating Committee
NFP	National Focal Point
NGO	Non-Governmental Organization
NOWPAP	Northwest Pacific Action Plan of UNEP
NTF	National Task Force
OHSAS	Occupational Health and Safety Standard
P	Phosphorus
PCC	Project Coordinating Committee
PDR	People's Democratic Republic
PEMSEA	Partnerships in Environmental Management for the Seas of East Asia
PNLG	PEMSEA Network of Local Governments
PO	People's Organization
POI	Plan of Implementation

PPP	Public-Private Partnership
PR	People's Republic
PRF	PEMSEA Resource Facility
PSC	Programme Steering Committee
PSHE-MS	Port Safety, Health, and Environmental Management System
PSSA	Particularly Sensitive Sea Area
RNLG	Regional Network of Local Governments
RO	Republic of
RPO	Regional Programme Office
RTF	Regional Task Force
SBAA	Standard Basic Assistance Agreement
SDS-SEA	Sustainable Development Strategy for the Seas of East Asia
SGP	Small Grants Programme of GEF/UNDP
SME	Small and medium-sized enterprises
SOC	State of Coasts
STAP	Scientific and Technical Assessment Panel
TOR	Terms of Reference
TPLM	Total Pollution Load Management
TPR	Tripartite Review
UN	United Nations
UNCLOS	UN Convention on the Law of the Sea 1982
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WB	World Bank
WI	Wetlands International
WSSD	World Summit on Sustainable Development
WWF	World Wide Fund for Nature

GEF/UNDP Project Document

Implementation of the Sustainable Development Strategy for the Seas of East Asia

PROJECT CONTEXT

From 1999 to 2006, the major goals of the GEF/UNDP/IMO PEMSEA Regional Programme[1] were: 1) formulation and adoption of integrated approaches to managing land and water uses among participating countries; 2) development of human resources in areas of planning and sustainable management of coastal and marine areas; 3) demonstration of integrated coastal management (ICM) as a systematic and effective approach to managing land and water uses in coastal areas, especially at the local level; and 4) adoption of a sustainable regional mechanism to augment the national and regional commitment to protection and management of the coastal and marine environment of the East Asian Seas.

In December 2003, the *Putrajaya Declaration* was signed among 12 littoral states[2], recognizing the importance of sustainable development and management of coastal and marine resources within the region, and committing individual and collective efforts of the countries to the implementation of the *Sustainable Development Strategy of the Seas of East Asia (SDS-SEA)*[3]. The SDS-SEA is a regional marine strategy covering the six large marine ecosystems (LME's)[4] of the East Asian Seas and their associated watershed areas, and represents an integrated and ecosystem-based response of the countries and stakeholders in the region to the WSSD Plan of Implementation, the UN Millennium Development Goals, and Agenda 21.

On 15 December 2006, the *Haikou Partnership Agreement* was signed among 11 countries[5], thereby formally establishing PEMSEA as the regional coordinating mechanism for the implementation of the SDS-SEA. The Agreement also confirmed the countries' resolve to transform PEMSEA from a regional project-based arrangement to a self-sustained and effective regional collaborative mechanism with a mandate to pursue the implementation of the SDS-SEA through collaborative, synergistic and responsible actions.

The regional coordinating mechanism established by the countries is a unique and innovative approach to management of the regional seas. The mechanism is not legally binding, as is the case with regional conventions. Rather it is an arrangement founded on the principles of partnership, and dedicated to the achievement of the shared vision and objectives of the SDS-SEA. As a partnership, the regional arrangement is inclusive of all concerned stakeholders and is outcome-oriented, meaning that the partnership is based on identified common objectives or goals of government and non-government stakeholders alike. The PEMSEA partnership is applicable across various political, geographic and institutional scales. For example, there is the multi-country political scale coved by the SDS-SEA; there is the ecosystem-based, multi-country

[1] PEMSEA Regional Programme or PEMSEA refers to the GEF/UNDP/IMO Regional Programme on Building Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), 1999-2006
[2] Signatories to the Putrajaya Declaration include the Governments of Brunei Darussalam, Cambodia, China, DPR Korea, Indonesia, Japan, Malaysia, Philippines, RO Korea, Singapore, Thailand and Vietnam.
[3] PEMSEA. 2003. Sustainable Development Strategy for the Seas of East Asia: Regional Implementation of the World Summit on Sustainable Development Requirements for the Coasts and Oceans. PEMSEA, Quezon City, Philippines
[4] The 6 LME's include East China Sea, Indonesian Seas, South China Sea, Gulf of Thailand, Sulu-Sulawesi Sea, and Yellow Sea.
[5] Signatories to the Haikou Partnership Agreement include the Governments of Cambodia, China, DPR Korea, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Thailand, Timor Leste and Vietnam.

scale that is a GEF priority, that of the six LMEs in the region; and, there are the national inter-ministry and local scales, which include policies, strategies and work programs involving ICM, river basin management, fish refugia/local habitat restoration, nutrient reduction, and so on. Through the partnership process, a broad range of priority issues may be covered across these different scales, effectively coordinating and applying the resources, skills, experience and interests of government and non-government partners and collaborators, for effective implementation of the SDS-SEA, SAPs of LMEs, and national and local response programs.

On 16 December 2006, twelve (12) stakeholder organizations[6] signed the *Partnership Operating Arrangements*, thus becoming the first group of non-governmental organizations to be formally recognized as PEMSEA Partners for the implementation of the SDS-SEA. The countries of the region are committed to implement the SDS-SEA. Building upon the foundation established by the Regional Programme[7] and other sub-regional initiatives, the proposed project serves as an essential catalyst in the long-term implementation of the SDS-SEA. While the SDS-SEA has attracted high-level country commitment, its successful implementation requires enhanced coastal and marine policy, improved interlinkages in planning and managing interventions at the local, national, sub-regional and regional levels, a dedicated effort to scale-up local capabilities in integrated coastal management (ICM) and/or other adopted management systems, and the mobilization of significant international, regional and domestic financial investments in pollution reduction. These outcomes are the primary targets of the proposed project.

The Strategic Partnership Arrangement

The establishment of GEF's innovative operational modality[8] – the Strategic Partnership – has a good fit with the regional partnership approach recently adopted by PEMSEA participating countries. A Strategic Partnership aimed at catalyzing and scaling-up investment in land-based pollution reduction in coastal areas in East Asia will be established, initially, between the GEF, the World Bank, UNDP and the new PEMSEA regional mechanism. Land-based pollution is well-recognized as having regional and transboundary significance in the East Asian Seas, and is a priority concern of SDS-SEA implementation. The impacts of land-based pollution, such as widespread eutrophication, health hazards, and degradation of fisheries and spawning grounds, are felt by all countries in the region.[9] Furthermore, insofar as the Seas of East Asia are a major economic resource for the world's demand for fishery and aquaculture products, and a major natural heritage and biodiversity resource for the people of the world, these impacts have global significance.

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[6] The 12 PEMSEA Partners include: Conservation International Philippines; Coastal Management Center; UNDP/GEF Small Grants Programme; IOC/WESTPAC; Korea Environment Institute; Korea Maritime Institute; Korea Ocean Research and Development Institute; Ocean Policy and Research Foundation; Oil Spill Response and East Asia Response Limited; Plymouth Marine Laboratory; UNEP Global Programme of Action; and the UNDP/GEF Yellow Sea LME Project.

[7] In addition to the regional institutional milestone, progress was also achieved at the country and local levels as a consequence of the Regional Programme including: the establishment of six new national ICM demonstration sites; implementation of 18 voluntary parallel ICM sites; sustainable public-private partnership arrangements; inclusion of ICM practices into the regulatory frameworks of national and local governments; confirmation of institutional and community arrangements for coastal and marine environmental management; development of intellectual capacity, scientific and technical skills through training programs and linkages with universities and scientific and technical institutions; enhanced awareness of the socio-economic benefits of ICM; and public participation in planning improved environmental facilities and services.

[8] GEF-4, which will be implemented from 2006-2010. As defined by GEF, a Strategic Partnership consists of a major component, the Investment Fund (hosted by a multilateral bank), accompanied by a parallel project for regional capacity building, coordination and replication (i.e., the Regional Component).

[9] World Bank, 2005. *Environment Strategy for the World Bank in the East Asia and Pacific Region*, World Bank: Washington D.C.

The Strategic Partnership is designed to coordinate the effective implementation and interaction of two GEF-supported projects, namely the proposed *GEF/UNDP Implementation of the SDS-SEA*, and the *World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia*, as approved by GEF Council in November 2005. A major objective of both projects is the replication and scaling up of good practices. Therefore a key element of the Strategic Partnership is the collaborative effort to identify, prepare, promote and facilitate replication of pollution reduction facilities, technologies, practices and services that are proven to be effective in achieving desired on-the-ground changes, while at he same time being acceptable and affordable by the local communities or industry.

To this end, the GEF/UNDP project aims to put in place the necessary policy reforms, institutional arrangements, partnerships and capacities to scale-up ICM programs across the region, covering more than 20% of the coastline by 2015. An important component of ICM implementation is the development and implementation of local initiatives, which are designed to address strategic objectives, including:

- to reduce pollution and the resulting destruction and degradation of land areas, rivers and coastal waters;
- to protect and conserve biodiversity;
- to promote sustainable supply and use of waters;
- to strengthen food security, especially in developing sustainable fisheries and aquaculture practices;
- to improve capacities in managing and responding to natural and man-made disasters; and
- to create alternative livelihoods for the coastal poor.

In parallel, the project managed by the World Bank aims to reduce pollution discharges by leveraging investments in pollution reduction through the removal of technical, institutional, and financial barriers. Expected outcomes of the *Partnership Investment Fund* are increased investments in pollution reduction activities, targeting from US$ 850 million to US$ 1.5 billion in new investments.

Together, these two projects will provide a mechanism for GEF, the World Bank, UNDP and the PEMSEA participating countries and partners at the global, regional, sub-regional and national levels to mainstream the objectives of the SDS-SEA into their regular programs. Each will use its comparative advantages to strategically assist the countries in reaching their SDS-SEA or adopted SAP objectives. For the World Bank, this includes utilizing its political convening power, financial leveraging capacity, and global knowledge, to support countries as they take the necessary actions to implement full on-the-ground operations in support of reforms, investments, and management programs needed to implement pollution reduction facilities and services and to ensure the transition to sustainable development of the seas of East Asia. For the GEF and UNDP, the project catalyzes core capacities within and among countries at the national level over a six year period, to promote and implement policies, capacity development programmes, financing mechanisms and partnership arrangements among the public and private sectors in support of scaling up ICM programmes. Overall, through the innovative activities undertaken by the Strategic Partnership, the countries will develop a more supportive policy and investment environment. Moreover, it is intended that by the end of the implementation period of the Strategic Partnership, the objectives of the SDS-SEA would be firmly mainstreamed into the operations of the World Bank and other participating organizations. From the experience of this first Strategic Partnership, partnerships with donor agencies and other stakeholders could also be developed, to enhance the implementation of the SDS-SEA.

The Strategic Partnership has another implication, and that is its umbrella function for sub-regional initiatives and programs. The trust and partnerships being built among PEMSEA members and Strategic Partners to meet regional (and global) development targets for coasts and oceans, also provides a support mechanism for confronting several contentious transboundary issues at sub-regional levels, such as: illegal and destructive fishing; overexploitation of straddling stocks; degradation of habitats of migratory species; transborder pollution; introduction of alien species via international shipping; etc. The ongoing LME projects in the South China Sea/Gulf of Thailand and the Yellow Sea are already facing some of these challenges, while the pipeline projects in the Sulu-Sulawesi Seas and the Arafura-Timor Seas will be engaging similar issues in the near future.

The SDS-SEA, its regional partnership mechanism and the Strategic Partnership arrangement facilitate interlinkages of scale and primacy of nested GEF interventions, ensuring that regional, sub-regional, national and sub-national scales are accommodated and accorded priority. The six-year partnership program being developed under this project provides the framework for the implementation of interlinkages of management interventions at the different scales. Furthermore, by sharing experience, knowledge and good practices, and setting targets for change at the broader, regional scale, the rationale and foundation for more specific objectives, actions and targets that are developed and adopted in future sub-regional SAPs, are substantiated. The PEMSEA partnership framework provides sub-regional projects and programs with:

- a regional implementing mechanism for coordinating the development and implementation of adopted strategies and action plans across national and sub-regional sea boundaries (i.e., the EAS Partnership Council);
- a systematic process for monitoring, evaluating and reporting progress in meeting SDS-SEA, SAP and country objectives and targets (i.e., State of Coasts report);
- a mechanism for the development, implementation and replication of pollution reduction projects, as well as addressing other strategic issues (i.e., Strategic Partnership arrangement involving World Bank, UNDP, PEMSEA, sub-regional and regional projects and programs, and other concerned international institutions and organizations); and
- an opportunity to share and benefit from lessons learned and good practices in the sustainable development and management of coastal and marine resources across the LMEs of the region (EAS Congress; Ministerial Forum; training workshops; leadership forums; etc.).

THE CURRENT SITUATION

1. The Seas of East Asia are home to 30% of world coral reefs and mangroves, about 40% of the world fish catch, and 84% of the world aquaculture production, and are considered a world center for tropical marine biodiversity. Some 1.9 billion people live in the region and this is expected to increase to 3 billion by 2015. Economic activities are largely clustered around the region's coastal cities that play host to an estimated 77% of the 1.9 billion people. Traditional resource-based activities, such as coastal fisheries, aquaculture, forestry and agriculture, are found side by side with industry, shipping and tourism. Half of the world's merchant fleet sails through the Malacca and the Lombok Straits, while 14 of the 20 largest maritime ports in the world are located in the shipping corridor that stretches from Singapore to Japan.

2. Capture fisheries from the South China Sea contribute 10% of the world's landed catch, at around 5 million tonnes per year. From the standpoint of aquaculture, five of the eight top shrimp producers in the world are countries bordering the South China Sea, namely: Indonesia, Vietnam, China, Thailand and the Philippines. Coral reefs and mangroves, together with seagrass beds, soft bottom communities and tidal wetlands provide food, employment and foreign exchange earnings to the countries of the region. For example, in Indonesia and the Philippines, which contain 75% of the region's coral reefs, the annual economic returns from this resource are estimated at US$1.6 billion and US$1.1 billion per year, respectively. For the whole Southeast Asian region, the potential economic value of well-managed coral reefs is estimated to be 42.5% of the global total of US$29.8 billion.

3. Growing populations and their migration to coastal areas, dynamic economic growth, and rising global demands for fishery and aquaculture products, largely met by export products from the East Asian Seas, and rapidly increasing shipping traffic, have combined to exert tremendous pressure on East Asia's marine environment and coastal resources. Decades of advocacy, political commitments and conservation efforts at the national and regional levels have not prevented the Seas of East Asia from degrading at an ever-increasing pace. Arresting and reversing the decline is an urgent task that requires a new approach, a new paradigm. That paradigm is a *strategic partnership of governments, international organizations and donors, and stakeholders from all sectors of society*, from within and outside of the East Asian Region, working together to achieve a shared vision of a sustainable resource system for the Seas of East Asia.

4. During the current phase of PEMSEA, initial steps were taken to strengthen partnership approaches, and the expansion and bolstering of these arrangements will be an integral component of the next phase. Implementation of the SDS-SEA and its associated regional coordinating mechanism will not only enhance national and international support for achieving the shared goals of nations, but limit redundancy, improve efficiency, and enhance national and regional communication among sectoral stakeholders.

Figure 1: The LME's of the Seas of East Asia

Geographic Scope

5. The six LMEs of the East Asian Seas are semi-enclosed and interconnected, with a total sea area of 7 million km^2, a coastline of 234,000 km, and a total watershed area of about 8.6 million km^2.

6. The LMEs are ecologically and economically important to the region and globally, and provide a variety of ecological services, such as provision of spawning and nursery grounds for many pelagic fish, home to complex biotic communities, and a center of marine shallow water supporting extremely high biological diversity and biologically diverse marine environments. Associated river systems within the region of the Seas of East Asia include: (1) the Mekong River, with its unique lake-river system and globally significant wetlands and flooded forests,

supporting one of the most productive and diverse freshwater ecosystems in the world, crossing China, Myanmar, Lao PDR, Thailand, Vietnam and Cambodia before entering the South China Sea; (2) the Yangtze river in China, Asia's longest river and a major trade and transportation route; (3) the Yellow River, China's second longest river, passing through the densely populated North China Plain before reaching the Bohai Sea; and (4) the Red River with one of the largest watersheds in Southeast Asia, originating in China and passing through Vietnam to the South China Sea.

7. The Yellow Sea region has diverse physical and socio-economic characteristics. It is a resource shared by China, DPR Korea and RO Korea. It includes the Bohai Sea to the north and is connected to the East China Sea in the south, forming a continuous circulation system. It is an important global resource for coastal and offshore fisheries, with nearly 1600 species being reported in marine and coastal habitats. Approximately 600 million people live in the areas around the Yellow Sea.

8. The East China Sea is distinctive in many aspects. The drainage basin is densely populated with approximately 300 million people living in the area. The region receives a large inflow of freshwater and terrestrial sediments, mainly from mainland China, of which the Yangtze River is responsible for about 90 to 95%. The East China Sea is bounded by China to the west and south, Korea to the north and Japan to the east. In the eastern part of the sea, the Kuroshio Current flows northward along the continental slope, effectively isolating the sea from the Northwest Pacific Ocean. It has shallow coastal waters that provide spawning and nursery grounds for many pelagic fish.

9. The South China Sea has long been recognized as the global center of marine shallow water, tropical biodiversity, with more than 2500 species of marine fish and more than 500 species of reef building coral present. It is bordered by China to the north, the Philippines to the east, Malaysia, Singapore, Indonesia and Brunei Darussalam to the south, and Thailand, Cambodia, and Vietnam to the west. The present population of the area is about 350 million. The South China Sea is also an area of great multi lateral importance, being one of the world's busiest sea lanes and a source of dispute over sovereignty of the Spratly Islands and other offshore resources.

10. The marine waters of the Sulu-Celebes Sea are bounded on most of its northern and western extent by the islands of the Philippines and the South China Sea, on the southern extent by the islands of Borneo and Sulawesi and the Indonesian Seas, and the eastern extent by the Pacific Islands. The region lies within the global center of biodiversity for both marine and terrestrial species, with more than 400 species of reef building corals and 2,500 species of marine fishes. Total population of the region is approximately 34 million. The coastal areas of the Sulu-Celebes Seas serve as important spawning grounds for the entire region.

11. The Indonesian Seas area contains most of the land and seas of the Republic of Indonesia. The present population of the region is approximately 210 million, with nearly 140 million living within 60 km of the coast. The importance of the Indonesian Seas stems partially from the fact that they support an extremely high biological diversity, including both demersal and pelagic fisheries, sharing highly migratory fish resources (e.g., tuna, mackerel, round scad) with adjacent countries (Australia, Philippines and Malaysia).

12. The Gulf of Thailand is part of the Sunda Shelf and is relatively shallow, with depths varying between 45 and 80 meters. Twenty-three rivers, including 5 major ones, drain large amounts of fresh water into the Gulf. Because of the shallow nature of the Gulf, the slow water

exchange and strong water inflow from the rivers make the Gulf lower in salinity (3.05-3.25%) and also rich in sediments. Only at the greater depths, water with a higher salinity (3.4%) flows into the gulf from the South China Sea and fills the central depression. The countries bordering this LME are Thailand, Vietnam and Cambodia.

13. Further details on the characteristics of the LMEs may be found in **Annex 8**.

Threats and Root Causes

14. The region's coastal ecosystems have been central to its development. As such, coral reefs, mangroves and other coastal habitats that are part of coastal ecosystems are subjected to varying degrees of pressure and are exhibiting signs of serious degradation due to human activities. The major threats to these coastal ecosystems emanate from the rapidly increasing population, as a consequence of increasing migration to coastal areas. Such threats include pollution and sedimentation, overfishing and destructive fishing, habitat loss and overexploitation, and climate change and sea-level rise. (More specific details with regard to threats, root causes and barrier analysis concerning the respective LMEs may be found in **Annex 8**.)

a) Over fishing and Destructive Fishing

15. Many countries in the region rely heavily on the coastal areas as a source of food and livelihood. A number of areas in East Asia, which are characterized by large coastal populations (e.g., Malacca Straits; Gulf of Thailand; the Java Sea; south Kalimantan, the Arafura Sea, and Manila Bay) have experienced similar impacts as a consequence of increased demands on fisheries, such as: leveling-off of, if not decline in, landings; a decline in catch rates; a decline in captured fish lengths; an increase in trash fish; virtual disappearance of certain commercial fishes; reduced incomes; reduced resource rents; and increased competition and conflicts among fishers. Aggravating these problems is the issue of illegal, unreported and unregulated (IUU) fishing occurring both within exclusive economic zones and on the high seas, which undermine efforts in managing fish stocks in all capture fisheries.

16. The global strategy to mitigate the decline in marine fish catch has been to purchase bigger fishing fleets and use sophisticated methods to increase catch and maintain markets. This has resulted in overcapacity, whereby the number of fishing fleets has the capacity to extract fish faster than the population can reproduce. From 1995 to 1998, East Asia alone reported an increase in decked fishery vessels from 980,417 to 1,022,062, or almost 78% of the world's capacity. This served to put further pressure on a declining fishery, and on the fishers who were challenged with paying off loans against their modern vessels, technology and equipment.

17. Over fishing and destructive fishing are estimated to be threatening 64% and 56% of the region's coral reefs respectively. It is estimated that blast fishing and cyanide use will cost Indonesia at least US$ 3 billion and US$ 50 million, respectively, in social and environmental costs over the next 20 years.

b) Habitat Destruction

18. The majority of the coastal habitats in the region are imperiled due to the combined effects of anthropogenic activities resulting in habitat alteration and degradation or loss. Coastal development, marine-based pollution, sedimentation, over fishing and destructive fishing are

identified as the major threats to the coral reefs of the region. Coastal development, which brings about increased sedimentation due to dredging and land reclamation, is a prevalent problem in areas where rapid expansions are occurring. For instance, Singapore reefs have been reclaimed, while reefs in Bangkok and Manila Bay have been smothered and killed by sediments, sewage and dynamite fishing. In Jakarta Bay, reefs have disappeared because of mining and pollution. In the last 30 years, 11% of the region's coral reefs collapsed, while 48% are listed in critical condition. Recent findings show 80% face risks. Unless managed properly, the region's reefs face collapse within 20 years.

19. Mangroves have lost 70% of their cover in the last 70 years, primarily due to uncontrolled conversion to aquaculture ponds, use of mangrove wood for firewood or charcoal, mining, coastal development and agriculture. Thailand and the Philippines have seen the areal extent of mangroves decline, with corresponding increases in shrimp production. Unless further effective management measures are instituted and intensified, the current rate of loss is predicted to result in total loss of mangroves by 2030.

20. Likewise, loss of seagrass beds in the region is of the order 20% to 60%. In Indonesia and the Philippines, about 30% to 40% and 30% to 50% of sea grass beds have been lost respectively over the past 50 years. The loss of seagrass is due to untreated sewage discharges, mismanagement of fertilizers and pesticides, excessive sediments, over fishing and trawler damage, and development activities, usually associated with dredging.

c) Pollution

21. The health of the Seas of East Asia is also significantly affected by river basins that are associated with the seas. Most of the pollution is due to land-based human activities, which includes municipal, industrial, agricultural and aquacultural wastes, land runoff, and atmospheric deposition. Estimates of domestic sewage treated prior to discharge amounts to only 11%, while billions of tonnes of industrial wastewater are being discharged annually from major coastal cities without pretreatment. Another 10 million tonnes of fertilizers are used each year in coastal areas, adding to the already excessive nutrient loading in receiving rivers, lakes and marine waters. The adverse impacts on public health, sustainable supply of goods and services, and the export trade of sea products are considerable. Harmful algal blooms (HABs), commonly known as red tide, have become more frequent not only in extent but also in duration for the past three decades. The frequent occurrence of red tides, some of which are toxic, has been a serious concern in the region, especially its impacts on fisheries and mariculture, in addition to its toxic effects caused by consumption of contaminated shellfish. In the Philippines, the reported cases of over 2,000 paralytic shellfish poisoning since 1983 have led to 115 deaths and economic losses of about 10 million pesos for each event. In Hong Kong, a bloom in 1998 killed off 3,500 tonnes of cultured fish or over 80% of stocks valued at US$40 million. It is further evident that the poor and destitute, a substantial number of whom live in coastal areas of the region, suffer the most as a consequence of pollution, destruction and degradation of natural resources, and contamination of drinking water and food supply.

22. With the projected tripling of international trade and shipping traffic in the next 20 years, the threat of oil spills remains imminent in the region. About 96% of oil spilled in the Asia Pacific Region since 1985, occurred in East Asia. Closely associated with shipping activities is the release of ballast water that is a reported avenue for the introduction of alien species and other marine organisms that threaten ecosystems and public health.

d) Climate Change and Sea-Level Rise

23. Increasing emissions of green house gases and aerosols from burning of fossil fuels and extreme changes in land use and land cover is projected to effect global and regional changes in climate, affecting temperature and precipitation. In turn, sea level rise, flooding and other extreme weather disturbances are expected to create catastrophes, especially in East Asia given the region's vast coastlines, concentrations of populations in coasts, and productive land in low-lying areas. Coupled with the loss of coral reefs and mangroves, which provide shoreline protection during hurricanes and tropical storms, the vulnerability of coastal populations and infrastructure to climate change and sea-level rise is further exacerbated. From 1995 to 2004, the cost of natural disasters in the region was estimated at more than US$ 300 billion in damages, and in excess of 445,000 human fatalities. The tsunami of 26 December 2004 killed more than 250,000 people in countries around the Indian Ocean, and caused massive losses in properties, habitats, livelihoods, infrastructure and crops. This occurrence, although immensely tragic, has spawned a renewed interest in highlighting the vulnerability of coastal ecosystems, the imminent loss of services they provide, and measures for their more effective management, including the use of ICM as a framework for coastal hazard management.

Institutional and Sectoral Context

24. Over the past six years, the hallmark of PEMSEA has been its focus on building and strengthening intergovernmental and multi-sectoral partnerships for sustainable coasts and ocean development. The Terminal Evaluation Report on the PEMSEA Regional Programme cited a number of areas and examples where progress has been made with such partnership arrangements, including:

a. At the local level, PEMSEA successfully demonstrated the applicability and cost-effectiveness of the ICM framework and processes for achieving sustainable use of the natural resources and ensuring environmental sustainability, in collaboration with local government units, local leaders, community groups and private sector partners at 6 national ICM demonstration sites, and 18 ICM parallel sites;

b. At the national level, PEMSEA promoted the development of national coastal and ocean policies, legislation and action plans to strengthen ocean and coastal governance, by providing policy guidelines and policy briefs, and organizing policy workshops and think tanks to enhance national efforts. Partnerships among coastal provinces, municipalities, cities, national agencies, donors and NGOs facilitated the adoption of the Manila Bay Coastal Strategy and Bohai Sea Sustainable Development Strategy, the Presidential Executive Order (No. 533) adopting ICM as a National Strategy to Ensure Sustainable Development of the Coastal and Marine Environment and Resources in the Philippines, and national legislation on the Bohai Sea.

c. At the sub-regional level, PEMSEA was able to engineer a sub-regional partnership among the littoral countries of the Gulf of Thailand. The development and endorsement of the Joint Statement of Cambodia, Thailand and Vietnam on Partnership in Oil Spill Preparedness and Response in the Gulf of Thailand, together with a related Framework Program, provide clear evidence of the partnership that has been built, as well as spin-off benefits regarding capacity building and preparedness activities in cooperation with the petroleum industry.

d. At the regional level, the development and endorsement of the Sustainable Development Strategy for the Seas of East Asia, an unprecedented output of PEMSEA, has provided the much needed regional policy, management frameworks and platforms for regional cooperation. The outcome of the work became apparent with the signing of the *Putrajaya Declaration* in December 2003.

25. Nevertheless, as recognized in the Terminal Evaluation Report, a considerable amount of time is required for effective partnerships to be established and to take root. A regional partnership mechanism (Figure 2) was developed by the countries as a means of coordinating the implementation of the SDS-SEA. The new mechanism was adopted by the concerned governments in December 2006 through the *Haikou Partnership Agreement*. The new partnership mechanism provides the needed regional institutional arrangement to consolidate these gains, and to put the implementation of the SDS-SEA on a self-sustaining path.

Policy Context

26. In assessing the state of policies and programs across the region, with respect to the implementation of the SDS-SEA, it is evident that:

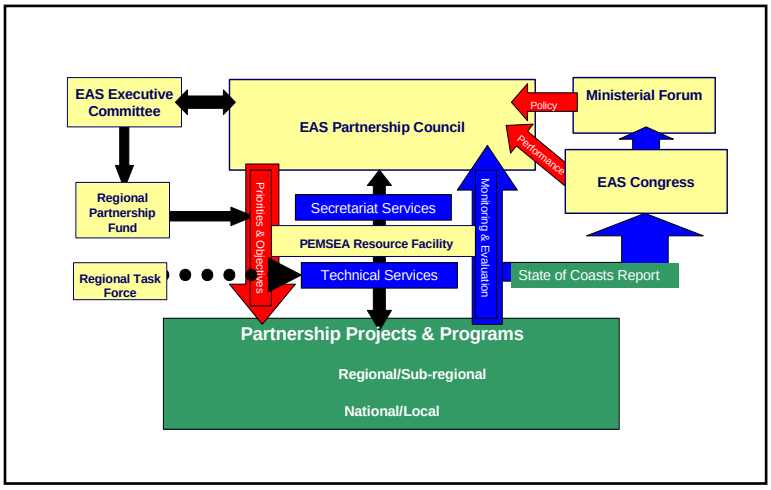


Figure 2: Regional Mechanism for the Implementation of the SDS-SEA

a. Efforts are primarily focused on the PROTECT, DEVELOP and COMMUNICATE strategies of the SDS-SEA (i.e., protecting ecosystems, human health and society from risks which occur as a consequence of human activity; developing sustainable economic activities in marine and coastal areas; and communicating the enhancement and exchange of ideas, information and knowledge among stakeholders covering public awareness and understanding of coastal and marine resource management issues and processes). While there is no implicit hierarchy on the levels of implementation of the SDS-SEA, the imbalance implies varying levels of awareness, institutional arrangements, capacities, and commitments. Hence, a targeted approach that addresses these disparities and gaps at the national and sub-national level is required.

b. The IMPLEMENT strategy, in general, appears to have the least amount of resource commitments among countries (i.e., implementing capacity building and institutional frameworks for executing relevant international conventions and agreements). This suggests that countries are more focused on matters within their borders, and there is a lack of regional thinking, which invariably undermines cross-sector and transboundary programs. A more integrative perspective is warranted to address cross-cutting and transboundary challenges to sustainable development, including strengthening of coastal and marine governance at the national and regional levels, and up-scaling ICM

as a framework for achieving the objectives and targets of international environmental instruments through local government implementation.

c. There is considerable variance in the levels of activities and resource allocations under the SUSTAIN and PRESERVE strategies (i.e., sustaining the region's biological diversity; and preserving coastal and marine resources and areas that should be maintained because of their intrinsic value, including MPAs, rare, threatened and endangered species and genetic resources, and transborder areas of social, cultural, historical and geological significance). Increasing the understanding and capacities of countries to focus on the challenges of sustainable development, particularly as related to living resources and ecosystem-based management, is needed. In particular, a more integrated perspective is warranted to address these issues as part of a holistic management approach, for development and implementation at the local level.

27. Policy and legislative gaps and disparities in capacities and priorities of individual countries may be summarized as follows:

a. Although **Cambodia** does not have a comprehensive marine policy, a number of action plans and programs related to the SDS-SEA implementation are ongoing, including a National Environmental Action Plan, a New Social Policy Agenda, National Biodiversity Strategy and Action Plan, a Socio-Economic Development Plan 2001-2005 (SEDP2), and a National Poverty Reduction Strategy 2003-2005. Recognized limitations in capacity and coordination are affecting the implementation of these programs, as well as the overall functionality of national mechanisms for sustainable coastal and marine management. Enhancement of human capacities and financial resources is required in order to pursue development projects, including policy initiatives to attract private sector participation.

b. Under the Marine Environmental Protection Law 1999 (MEPL99) of the **People's Republic of China**, governments at various levels in the coastal regions are held responsible for maintaining marine ecosystem health. In addition, China has established a comprehensive ocean management system along with a comprehensive legal system that deals with the Exclusive Economic Zone and continental shelf, and functional sea use and coastal use zoning schemes. However, lack of coordination and local capacity persists, thereby inhibiting sustained and effective participation of stakeholders and effective monitoring and evaluation of progress. In addition, an inter-agency and multi-sectoral coordinating mechanism for the implementation of SDS-SEA country program/policies would integrate on-going and future pursuits towards realization of the SDS-SEA.

c. **Indonesia**'s maritime development has largely been directed toward strengthening of national sovereignty and jurisdiction based on the archipelagic outlook, which has been recognized as the national strategy for development. However, the strategy has not been implemented fully with regard to oceanic issues. In addition, policymakers in the past have taken a more continental approach to development, and have been unaware of the economic importance and potential of Indonesia's marine resources. The new Department of Marine Affairs and Fisheries faces critical challenges. It must identify core coastal and ocean management issues and devise an appropriate organizational structure to deal with such issues. Complicating the task is the current era of reform and decentralization, which has led to the reshaping of the central government's role. Despite the promising prospects offered by its potential marine

resources, Indonesia's marine environment faces serious problems from land-based and sea-based pollution, over fishing, degradation of coastal habitats, conflicts over maritime space and resource utilization, illegal fishing and illegal dumping of wastes, and the challenge of poverty among fish farmers and traditional fisher folk. A recent effort by the Indonesian legislative assembly to develop national legislation for coastal and marine areas and small islands is seen as a positive step forward.

d. The **Philippines**' National Marine Policy (1994) was intended to comprise a comprehensive action plan to implement UNCLOS, and to introduce the concept of archipelagic development and consideration of coastal and marine areas as the locus of community and resources. The policy was intended to set the stage for orienting development planning away from traditional land-focused strategies. Despite the existence of the policy, the governance of the country's marine resources and activities remains fragmented and uncoordinated. In 2004, A Framework for Sustainable Philippine Archipelagic Development (ArcDev) was prepared, in order to seek ways of improving implementation mechanisms and of harmonizing various resource use and access arrangements. However, the Arc Dev was never formally adopted by the Government. On 6 June 2006, Executive Order No. 533 was signed by President Gloria Macapagal Arroyo, officially adopting ICM as the national strategy for the sustainable development of the country's coastal and marine environment and resources, and establishing a national supporting mechanism for implementation. The new policy builds on PEMSEA's work in the Philippines over the past 12 years, and effectively commits the government to the implementation of the ICM scaling-up program, as identified in the SDS-SEA program of implementation. However, gaps in capacity and institutional mechanisms remain a priority concern in order to fully achieve the objectives of the Executive Order.

e. Since the creation of the Ministry of Maritime Affairs and Fisheries in 1996, the **Republic of Korea** has strengthened its capacity and institutional mechanism in integrated ocean and coastal governance by formulating a national ocean policy (Ocean Korea 21 (OK21)). In addition, the country enhanced its legal framework with the enactment of the Coastal Management Act and Wetland Conservation Act (1999), the Marine Ecosystem Conservation Act (2005), and Marine Environment Management Act (2006). The Coastal Management Act and other implementing legislation provide a mechanism for implementing integrated coastal management, including integrated planning and inter-agency coordinating committees at both national and local levels, as well as applying ecosystem-based management approaches. For the fiscal year of 2004, the total estimated government budget related to the implementation of SDS-SEA was US $1.2 billion. Key national players involved in SDS-SEA implementation include the Ministry of Maritime Affairs and Fisheries (MOMAF), the Ministry of Environment (MOE), the Ministry of Culture and Tourism (MOCT), the Ministry of Government Administration and Home Affairs (MOGAHA), the Ministry of Science and Technology (MOST), and the Ministry of Agriculture and Forestry (MOAF).

f. **Thailand**'s Navigation in Thai Waters Act was formulated as early as 1913 and its Fisheries Act in 1947. There are several other relevant laws that are sectoral and generally fall short of addressing cross-sectoral and multiple-use conflicts. This sectoral orientation relates to the institutional landscape that likewise failed to recognize the interconnectedness of environmental concerns. That leaves loopholes

in law enforcement. The newly-established agency, Department of Marine and Coastal Resources is currently drafting a new law concerning coastal management.

g. Significant policy developments have taken place in **Vietnam** over the past decade, including: the adoption of the Vietnam Agenda 21 and its implementing guidelines; the National Strategy for Environmental Protection of 2001-2010 and Vision Towards 2020; the Comprehensive Poverty Reduction and Growth Strategy 2001-2010; and the recent passing of the Master Plan on the Survey and Management of Marine Resources and Environment until 2010 and Vision until 2020. This latter Plan provides the legal framework for balancing coastal economic development with environmental protection and management. Although Vietnam has undertaken significant steps towards managing the use and exploitation of its coastal and marine resources, greater effort is needed to keep pace with the rapid industrialization and modernization that the country is experiencing. Specific priority program areas include: the development and implementation of policies on management of marine resources and environment; capacity building and technical infrastructure for the protection of marine resources and the environment; and international cooperation in the preparation of a sustainable development strategy for Vietnam's sea area.

h. **Lao PDR** has a number of framework strategies and directives on sustainable development including: the National Environment Strategy (2020); the Prime Ministerial Decree No. 164 on National Biodiversity Conservation Areas; a 5-year socio-economic development plan (2001-2005); the Mekong Agreement, and 2003 Strategic Vision on Integrated Watershed Management. The Water Resources Law and the Environmental Protection Law were issued in 1996 and 1999, respectively. The Water Resource Coordination Committee has been established. The Lao National Mekong Committee has core programs on water utilization, river basin development, and environment sector programs on fisheries, agriculture, navigation and water resource management.

i. **Timor Leste** lacks capacity in integrated management policies and approaches to sustainable natural resource development. Traditional fishing rights and restrictions apply and are widely respected.

Stakeholder Involvement

28. Stakeholder inclusion and participation is the principle strength of integrated management. Based on PEMSEA's experience and existing networks in the region, a full array of stakeholders are expected to participate in the project at the national level, including national ministries and agencies covering environment, agriculture, fisheries, health, education, transportation, energy, tourism, industry, foreign affairs, economic development, and finance. In addition to the public sector, national NGOs (e.g., scientific and technical societies; professional associations; sustainable development organizations) and the private sector (i.e., Chambers of Commerce; financial institutions; industry organizations) will be engaged as members of national coordinating committees (NCCs), tasked with developing and coordinating initiatives at the country level, including the formulation and implementation of national policy for coastal and ocean governance and programs aimed at: overcoming barriers and constraints to improving interagency and multisectoral coordination; scaling up ICM programs; strengthening public and private sector investments in pollution reduction facilities and services; and leveraging partnerships across governments and sectors to address transboundary issues through integrated watershed and coastal area management.

29. At the sub-national level, local governments implementing ICM programs will serve as the main vehicles for engaging stakeholders. A key management strategy of ICM is collaboration and coordination among agencies and stakeholders with coastal management mandates and concerns. All sites will have Project Coordinating Committees (PCC) composed of multi-sectoral representatives. The project calls for scaling up of ICM programs across the region to cover 5% of the total coastline by 2010. This implies that between 100 and 150 local governments will be initiating or implementing ICM programs over the next three years. Stakeholder groups will vary from community to community but, in general, will include local industry, SME's, community-based organizations (e.g., fisher folks, women's organizations, students, religious groups), educators, universities/academe, public healthcare providers, the media, and the private sector.

30. At the regional level, the EAS Partnership Council (i.e., part of the new regional partnership mechanism) will be the main mechanism by which national and international stakeholders will interact and collaborate on the implementation of the SDS-SEA. The EAS Partnership Council will be comprised of representatives from the national governments, local governments and communities, NGO's, research and educational institutions, the private sector, regional organizations, programs and projects, international agencies and organizations, and other countries using the Seas of East Asia. The Council will formulate both program and operational policy in support of the SDS-SEA implementation, based on policy direction, recommendations and commitments provided by the countries and their partners.

31. Existing efforts of international and regional organizations and programs in the region also contribute to SDS-SEA implementation, by executing their respective mandates to improve environmental quality in identified localities, enhance management capacity, and increase awareness of resource use problems and the need for replication of innovative management approaches. The UNEP/GEF Project entitled "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" fosters stakeholder collaboration and capacity building in addressing environmental problems, particularly related to fisheries, coral reefs, mangroves, seagrass and wetlands. The UNDP/GEF Yellow Sea Large Marine Ecosystem Project aims to protect, conserve and manage the Yellow Sea, focusing on sustainable fisheries management and the reduction of stress to the ecosystem. Building on the past and on-going national, regional and international efforts in the region, the SDS-SEA implementation project will facilitate further interaction and partnership arrangements among these efforts, addressing those environmental and resource use issues that cut across geographic, administrative and disciplinary boundaries in particular.

32. Finally, the EAS Congress, to be convened every three years, will bring together stakeholders from the different levels of government and sectors of society, from within and outside the region, for meaningful dialogue and knowledge exchange on progress, challenges, constraints and achievements concerning implementation of the SDS-SEA. In conjunction with the Congress, a Ministerial Forum will be organized to evaluate the contributions of the partnership arrangement to SDS-SEA implementation, as well as to reconfirm country commitments to regional and national targets and program objectives for the subsequent three years.

33. The Stakeholder Involvement Plan for the GEF project is attached in **Annex 6**.

Barriers to Sustainable Development

34. Some of the major barriers being experienced by countries of the region to arresting and/or reversing the downward trend in the productivity and quality of coastal and marine ecosystems can be summarized as follows:

a. *Policy and administrative overlaps among the various sectoral agencies, which are responsible for management of coastal and marine resources,* resulting in interagency conflicts and ineffective implementation of environmental laws. National policies are needed that mainstream coastal and ocean governance into the economic development policies and programs of the countries. In addition, nationwide application and expansion of ICM initiatives and efforts requires high-level political commitments and leadership, as well as a long-term vision and clear guidance in consideration of national development needs and priorities.

b. *Lack of coordination among the many agencies, projects, levels of government and sectors with mandates and a stake in sustainability of the resources of concern*. Strengthening national interagency and multisectoral mechanisms is required in order to coordinate and manage cross-sector use of marine and coastal resources in most countries.

c. *Limited understanding of coastal and marine ecosystems and the linkages between human activities in watershed areas, and the resulting impacts in estuaries, coastal areas and coastal seas*. Management interventions need to factor in the interdependence and impact of different activities on each other and on the ecosystem as a whole. This should be guided by sound scientific knowledge, which may not be readily available in all countries, or at sub-national levels. Relevant scientific and technical support are needed, building upon the existing intellectual capital that is available in the region.

d. *Inadequate management experience and capacities in ICM/ecosystem-based management among national and local governments*, thereby limiting the ability to scale-up integrated river basin and coastal area management efforts throughout the coastlines of the region. Greater emphasis is needed to address this capacity disparity within and among countries, applying the working models and knowledge gained at national ICM demonstration sites and ICM parallel sites, to establish national ICM technical support groups, and to develop relevant ICM materials and training programs in local languages.

e. *Limited public awareness and understanding of the importance of coastal and marine resources***.** People's feeling of a shared responsibility for the well-being of the next generation, and a long-term stewardship for the coasts and oceans are the key to the success of the sustainable coasts and ocean governance. Public awareness and participation, in partnership with the private sector, academe, NGOs and POs, needs to be improved, including a constructive role for the youth. Young people are the future consumers and stewards of natural resources. Their involvement is pivotal in determining whether existing efforts in environmental management will be sustained over time.

f. *Insufficient financial resources and/or lack of access to financing for the development and implementation of required environmental infrastructure*, including the much-needed water, sewage and sanitation facilities and services. Innovative policies, programs, financing mechanisms and arrangements are needed at the national and local levels to support environmental improvement projects, and to leverage investments and

partnerships among local governments, the private sector, financial institutions, and civil society.

g. *Lack of a regional mechanism and concrete, process-oriented agenda, focused on transboundary environmental and natural resource issues spanning the six LMEs of the region*. Countries acting independently are not able to solve the various transboundary problems occurring in the region, which also have serious in-country consequences, including: pollutant loadings from river discharges, ocean currents, sea-based activities, or atmospheric deposition of contaminants; over fishing and destructive fishing practices; operational discharges and accidental spills from ships; introduction of alien species; transboundary movement of hazardous wastes; trade in endangered species; sub-regional growth areas; and changes in consumption and use patterns and international trade. A new paradigm in regional collaboration is required if these constraints are to be overcome…one that involves not only governments, but international organizations, donors, financial institutions, industry, the business community, academe and civil society working in partnership.

Baseline and Alternative Scenarios

35. The East Asian region is composed of countries and economies spanning the spectrum of the rich and industrialized, along with the poor and underdeveloped. This disparity translates to wide variations in capability in the technical and financial sense. Without impartial external support, narrowing of such disparities would be extremely difficult to attain. Resources raised from within the region will naturally come dominantly from the best endowed among the member countries, and as such, are likely to be subject to allocation preferences that may not necessarily serve the interest of equity. On this basis, one may argue that continued external support via the GEF/UNDP funding mechanism would be crucial in addressing region-wide challenges and in promoting holistic and equitable implementation of the SDS-SEA. In particular, the support from GEF/UNDP and donors would allow the unequal economic development and capacities in the region to be dealt with. Greater equity will be a conscious goal, with the objective of turning the member countries into more equal partners in the subsequent periods of the project.

36. Under the *baseline scenario,* despite efforts taken in arresting environmental degradation, without further governance improvement and capacity development, the implementation of the SDS-SEA remains tenuous. Without visible signs of progress, political interest and support begin to wane, and fiscal restraints among some EAS countries result in reduced public environmental expenditures. Resource commitments do not increase commensurately with the need to address pressures on East Asia's natural resources. Threats to national and regional security, brought about by economic development and competition over limited resources (e.g., fisheries; mariculture; tourism; shipping; natural resource exploration/exploitation; coastal development) result in increased transboundary political, social, cultural, economic and environmental risks that have negative consequences both within and beyond the region. There would be no critical mass of partnership arrangements, across the bulk of the region, to maintain the awareness and momentum for change among the many sectors and key players.

37. The limited portfolio of investments in improved environmental infrastructure (i.e., water; sewage; sanitation; industrial and hazardous waste) among EAS countries continues to lack strategic channeling to address the pervasive and generally low public environmental expenditures. The role of the private sector, as a partner in investment, operation and

management of environmental facilities and services remains ambiguous, not being part of national policy and financing programs, designed to leverage such partnerships. International financial institutions continue to serve as a primary source of financing for environmental infrastructure in countries, but the pace of improvements is slow among the lesser developed countries. Priority environmental infrastructure improvements would continue to be identified by central governments in some countries, and funded through national government financing programs and/or IFI loans. Essential capacity building, scientific support, information gathering and knowledge transfer systems continue to be supported by donors and international agencies and organizations, albeit on an *ad hoc* basis.

38. For the most part, countries would continue to manage marine and coastal issues in a sectoral manner, and independently. Countries with the capacities and resources would progress towards sustainability of marine and coastal areas. Interagency and cross-sectoral conflicts would be resolved over time, as these countries begin to realize the benefits of an integrated management approach. However, other less-developed countries would remain mired in a struggle to achieve economic growth and prosperity, in the face of overexploitation, destruction and degradation of natural resources, poverty and social discontent. The gap between the developed and the developing would widen. While established coordinating mechanisms within the region would begin to take up some of the objectives and action programs of the SDS-SEA, these intergovernmental bodies are unable to provide the coverage or comprehensive support that is required to address the interconnectivity characteristics and issues of the East Asian Seas.

39. The *alternative scenario* is one in which PEMSEA continues to serve as a cohesive regional mechanism over a transition period of 10 years. The regional partnership mechanism for SDS-SEA implementation is able to generate trust among the different sectors, and to facilitate wide recognition of the benefits of a regional approach to sustainable development of the shared coastal and marine resources. Confidence among the government partners is strengthened, and agreement is reached on the establishment of an independent and self-sustaining regional mechanism, with its own legal identity.

40. The majority of countries develop national coastal and marine management programs, which parallel the management framework and policies outlined in the SDS-SEA. The 6-year framework of partnership programs, developed and adopted by the EAS Partnership Council, serves as a platform for south-south and north-south cooperation and collaboration, and facilitates the formulation and implementation of national policies, coordinating mechanisms and programs aimed at integrated management of watersheds and coastal areas. A principal strategy of national programs focuses on capacity building and local government implementation of ICM. The ICM framework and process advances from an era of demonstration to an on-the-ground management system for sustainable development of coastal lands and waters, covering at least 20% of the region's coastline by 2015. In addition, an ICM Code is developed and adopted by the countries. The Code is adopted for voluntary use as an international standard for ICM program development, implementation and evaluation, and as a basis for the certification and recognition of local governments implementing ICM programs.

41. Consequently, demands for increased investments in pollution reduction facilities and services are precipitated, resulting in a reduction in nutrient loadings to rivers and coastal areas. Innovative approaches to financing environmental investments and engaging the private sector as a partner are tested, evaluated and replicated, through strategic partnership arrangements with the World Bank, UNDP, UNEP and other international agencies and institutions. Practical experiences and good practices are packaged and shared across the region, resulting in policy

reforms and the adoption of innovative financing programs that further leverage public and private sector investments.

42. Most importantly, the unevenness of awareness and capacities within countries and among countries of the region is acknowledged, and efforts toward leveling of capabilities and sustaining partnerships are making headway. Through such initiatives as Areas of Excellence programs, networking of scientific institutions, professional upgrading and training programs, internships, study tours, and partnerships involving governments, the international community, the corporate/business sector, communities/NGOs and donors, the distribution of intellectual capital for managing marine and coastal ecosystems among the participating countries of PEMSEA is more balanced. The results are a better understanding of the interconnectivity between human activities and healthy ecosystems, and more equitable and sustainable use and management of coastal and marine resources at the country and regional levels.

PROJECT STRATEGY

Project Design

Project Rationale and Conformity

43. The proposed project corresponds to the GEF4 Strategic Objective to play a catalytic role in addressing transboundary water concerns by assisting countries to utilize the full range of technical assistance, economic, financial, regulatory and institutional reforms that are needed, including active leveraging of co-financing. The project is designed to establish/strengthen the necessary capacities among the participating countries and their national and regional partners, which will transform PEMSEA from a donor-sponsored, regional enabling project into a country-owned, self-sustaining regional mechanism for the implementation of the SDS-SEA.

44. The SDS-SEA is extremely significant as it is the first, and the broadest, partnership agreement in the region on the issue of managing the regional seas. The mission of the SDS-SEA is:

> *To build interagency, intersectoral, and intergovernmental partnerships for achieving the sustainable development of the Seas of East Asia.*

45. To this end, the countries of East Asia have agreed to establish an innovative regional partnership mechanism through transformation of the existing PEMSEA regional collaborative mechanism. The new regional mechanism, referred to as the East Asian Seas (EAS) Partnership Council, has been established with the current PEMSEA Project Steering Committee at its core, expanded to include invited representatives of international financing organizations, donor organizations, regional and bilateral organizations, local governments, NGOs, and private sector representatives. A PEMSEA Resource Facility (PRF) Secretariat Services, funded entirely by the participating countries, has been set up to provide member countries and their partners on the EAS Partnership Council with day-to-day secretariat support, including monitoring and evaluation of adopted work programs and time-bound targets.

46. The SDS-SEA addresses priority concerns in several sectors including land-based and sea-based pollution, overfishing, health and safety, loss of biodiversity, habitat preservation, sustainable water use and water resource management, natural and man-made hazards, and

other challenges of sustainable coastal management. The SDS-SEA identifies the variety of *values* of the Seas of East Asia to the people of the region, such as ecological, economic, aesthetic, recreational, historical, political, educational and cultural. It further identifies the threats to the maintenance of these values, and develops a shared vision of actions that would serve to sustain, preserve and protect these values for future generations. Land-based pollution (particularly from hotspots defined in the strategy) is identified as a primary threat to the Seas of East Asia. Reduction of land-based pollution through policy strengthening, capacity building, scaling up investments in pollution control, and the strengthening of environmental management in watersheds and coastal areas, are all confirmed as priority activities that would contribute to the strategy's main objective of achieving sustainability in the Seas of East Asia.

47. Supporting the conclusions reached by the countries of the region in the SDS-SEA, is the region's Global International Waters Assessment (GIWA), completed in 2005. This analysis, also sponsored by GEF, and following the international framework adopted by GEF for identifying environmental problems, has conducted detailed assessments of the Seas of East Asia, and has prioritized interventions for these problems. Like SDS-SEA, GIWA identified land-based pollution as a major threat in the region.

48. GEF resources in support of the implementation of the SDS-SEA are aimed at strengthening the operation of the new regional mechanism to bring about the necessary policy reforms, institutional arrangements, capacity development and partnership commitments at the local, national and regional levels. These efforts will generate a critical mass of operating arrangements, knowledge and competence within and among the countries and concerned stakeholders to address transboundary environmental concerns on a long-term and self-reliant basis.

49. The project is part of a "two-project" GEF Strategic Partnership for Sustainable Development of the Seas of East Asia, serving as the regional complement to the *World Bank/GEF Partnership Investment Fund for Pollution Reduction in the LMEs of East Asia*. The Investment Fund, the first tranche of which was approved by GEF Council in November 2005, is one of the primary financing arms of the land-based pollution reduction activities proposed in the SDS-SEA. The Investment Fund provides a mechanism through which the World Bank is able to engage with individual participating countries and the EAS Partnership Council to ensure the World Bank's investment and knowledge-building activities in the region contribute more effectively and on a larger scale to the countries' initiatives to achieve the goals of the SDS-SEA.

50. Specific outcomes of the proposed project that support the focus of the GEF4 International Waters Strategy include:

a. A functioning, multi-country/multi-sectoral regional mechanism for coordinating, implementing, monitoring and evaluating, and refining the implementation of the adopted SDS-SEA, including programs of work and time-bound pollution reduction targets;
b. National legislation, policy, institutional arrangements and programs in support of scaling up integrated coastal management (ICM)/ecosystem-based management (EBM) and pollution reduction investments in priority watersheds and coastal areas, targeting 20% coverage of the region's coastline with ICM programs by 2015;
c. Strong focus on using governance reform and investments as tools to combat land-based pollution from nutrients and oxygen-depleting substances that cause anoxic coastal 'dead zones';
d. Corporate sector/business community engaged in Strategic Partnership arrangements with national and local governments, the World Bank, other IFIs, and donors, developing

and demonstrating innovative cost-effective investment measures for reducing nutrient and oxygen demanding pollutants from the municipal, industrial and agricultural sectors in priority watersheds and coastal areas;

e. South-South and North-South twinning arrangements in river basin and coastal area management in place, facilitating the transfer of knowledge, skills and technology and accelerating the implementation of EBM programs and investments in identified transboundary pollution hotspots of the region;
f. Sustainable financing mechanisms established at national and/or regional levels (i.e., outcomes of Strategic Partnership demonstrations), advancing the scaling up and replication of good practices in public and private sector investments for pollution reduction, conservation/restoration of habitats, and alternative livelihood programs in coastal communities; and
g. A State of Coasts reporting system in place, providing feedback on the social, economic and environmental changes in priority watersheds and coastal areas at the national and regional levels, occurring as a consequence of management interventions under the SDS-SEA program, and serving as a platform for sharing the region's lessons and experiences in achieving WSSD and MDG targets with other IW regions/projects.

51. The GEF has invested US$24.2 million over the past 12 years in the PEMSEA Regional Programme and its predecessor, the regional project on Prevention and Management of Marine Pollution in the East Asian Seas. This US$ 2 million average annual investment has brought the region benefits far more than the face value of the grant, in the form of:

- discernable improvement in environmental conditions and natural resource stocks in many project demonstration sites;
- enhanced efficiency in natural resource use through wider adoption of coastal zoning schemes, legal and policy reforms, and overall governance improvements;
- a core base of ICM and sub-regional sea area/hotspot management experiences, which have leveraged investments by 18 local governments of the region, and some US$ 1.2 billion in management project funds and investment in Shihwa, RO Korea and Bohai Sea, China;
- improved governance of marine and coastal resources, including strengthened international cooperation and solidarity, as evidenced by the 16 international collaborators for the SDS-SEA;
- social and economic returns and benefits from investments in environmental infrastructure and rehabilitation of resources, as seen at ICM sites;
- partnerships, networks, scientific and technical skills, decision-making tools, and political will and commitments;
- co-financing, counterpart provisions and in-kind support in excess of 150% of the GEF contribution; and
- a unique regional strategy and implementing mechanism, founded on the experience, knowledge, processes and partnerships of the GEF-supported project.

52. PEMSEA has shown that, when used catalytically, GEF resources can pave the way for much more in resource commitments from, and benefits to, a variety of partners and stakeholders in the region, including the poor whose livelihoods and very sustenance depend on the bounties of the coasts and oceans. Given the continuing need, the mechanisms that have already been put in place, and the emerging critical mass of local, national and transboundary initiatives that have become evident, GEF support is essential in order to catalyze and secure the partnerships and commitments that are necessary to sustain the effort over the long-term.

The strategy of the Project is to put into operation a core set of partnership arrangements, capacities and capabilities at the regional, national and local levels that will facilitate the expansion and sustainability of SDS-SEA implementation, including key issues such as development of national policies concerning sustainable development, pollution reduction, etc., the scaling up of ICM across the region's coastline, and the development and implementation of investment plans for improved pollution reduction.

53. Although this submission covers only three years, the full project will be implemented over 10 years. The first 3 years will be the *transitional period*, in which countries, their partners and other stakeholders will develop, agree on, and commence the implementation of a 6-year framework of partnership programs. The focus of activities will be on national level legal, policy and institutional reforms for improved coastal and ocean governance, initiation and implementation of national ICM programs and scaling up at the national level, the codification of ICM as an on-the-ground practice for achieving sustainable development of coastal lands and waters in the region, reducing land-based pollution, protecting and restoring biodiversity and habitats, and fostering sustainable coastal fisheries and alternative livelihoods for the coastal poor.

54. The second 3 years will be the *transformation period*, in which the developed regional paradigm will be fully implemented, evaluated for effectiveness and appropriateness from the perspectives of the concerned government and non-government partners, improved, and transformed from a regional arrangement under the framework of the UN into a self-sustaining, long-term regional facility with its own legal personality. Outcomes will include: a sustainable regional mechanism for the implementation of the SDS-SEA; integration of ICM scaling up programs into the national economic development programs of the majority of participating countries; replication of good policies and practices as derived from the World Bank/UNDP/PRF Strategic Partnership into public and private sector financing programs for pollution reduction; operationalizing an ICM Recognition/Certification system to measure progress and conformity with the ICM Code; and incorporation of the State of Coasts reporting system into the majority of national reporting systems on marine and coastal resource management.

55. The final 4 years will be the *sustainable operation period*. The GEF would exit as a major sponsor of the project, and countries and their partners will take full responsibility for SDS-SEA implementation, and the sustainability of the strategic regional partnership and its operating arrangements.

56. The objectives, component activities, expected outputs and country participation in each phase of the 10-year transformation are summarized in **Annex 1**, as documented and agreed during the PDF-B consultation process.

Project Goal and Objectives

57. The *developmental objective* is to facilitate the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) through mobilization of the necessary partnership arrangements, operating mechanisms, intellectual capital, support services and resources for the achievement of the shared vision of sustainable use of coastal and marine resources of the region and the development targets of the WSSD Plan of Implementation and the UN MDGs.

58. The project's *global environment objective* is to promote environmental sustainability of the East Asia's six shared LME's and to transfer the acquired knowledge and lessons learned to countries within the region, to other countries, and to other regions of the world.

59. In pursuit of these objectives, the project will be implemented over eight (8) major components. The eight components entail three major categories of activity, namely: management, core operations, and supporting activities (Figure 3).

60. The Management category consists of activities and outputs related to the development and strengthening of the regional mechanism (i.e., the IMPLEMENT strategy of the SDS-SEA), which sets priorities and objectives, coordinates, monitors, evaluates and continually improves the approved program of actions for implementation of the SDS-SEA (Component A).

61. The Core Operations category and outputs include project components (Components B, C, and D) that will directly assist countries in achieving the overall mission and objectives of the SDS-SEA, particularly with respect to the PROTECT, DEVELOP, and IMPLEMENT strategies and action programs. For the transitional period, the focus will be on national policy and program reforms to strengthen SDS-SEA implementation, scaling up ICM programs at the national and local government levels, implementation of coastal strategies at PEMSEA ICM demonstration sites and pollution hotspots, and south-south and north-south technical cooperation in ecosystem-based management of watersheds, estuaries and adjacent coastal seas through twinning arrangements.

62. The Supporting Activities category and outputs (Components E, F, G and H) are those human, financial, scientific, technical, legal, information and corporate/private sector resources that are needed to ensure satisfactory performance of the core operating activities, as well as to facilitate sustainability and continual improvement of the SDS-SEA program at the local, national and regional levels (i.e., PROTECT, DEVELOP, IMPLEMENT and COMMUNICATE strategies and action programs). The supporting components are designed to remove disparities in capacity for core operating activities, among countries and within countries. The supporting components also serve as a window to the global community, receiving scientific, technical and financial advice and support through Strategic Partnership arrangements with the UNDP, the World Bank, and others, and providing case studies, good practices and lessons learned on innovative approaches to sustainable development of marine and coastal resources, as applied in the East Asian region.

63. The overarching strategy of the project is founded upon four values, which are built into each component of the work program, namely:

a. Partnerships, involving governments and key stakeholders from the public and private sectors at the local, national, and international levels, are the foundation for change. Each component activity of the project begins as a partnership, and each partner brings a positive dimension to problem solving and overcoming the barriers and constraints to achieving the objectives of the SDS-SEA.

b. Capacity development is a continuing process. It begins with education and training, but is nurtured and expanded through application, hands-on experience, information sharing, knowledge development and transfer and, basically, learning from each other. Each activity of the project entails some form of capacity development, mobilizing existing intellectual capital at the community level, scientific institutions, government agencies, the private sector, and/or the international community, for the benefit of the work

program and, over the longer term, for sustainable social, economic and environmental development.

c. The efficacy of the project's 'scaling-up' thrust is dependent upon the outcomes of policies, activities and investments that will serve as good practices for replication within a country, or among countries of the region, under similar circumstances. The replication potential of a policy, practice or process is therefore a key measure of its value, and is integrated into each activity of the work program.

d. Societal change happens over an extended period. With the development of awareness, understanding, and capacity transformations in the environment occur. Measuring and assessing progress toward desired goals of the SDS-SEA requires indicators that not only focus on the long-term changes in the environment, but also indicators that reflect the behavioral shifts of society and responses to the root causes of environmental degradation and destruction. The State of Coasts reporting system (Component A) will provide the means to identifying and monitoring these indicative changes.

64. *Adaptive management* underpins the various components of the project's work program, in recognition of the many different and complex issues in coastal areas across the region. For example, the processes in each component are flexible and gradual; outputs serve as guideposts that may need to be realigned or at least rescheduled depending on the local situation; and progress is always measurable but the rate of progress is relative to capacity. These aspects of adaptive management, and others, will be applied throughout the implementation of the work program.

Project Outcomes, Outputs and Activities

65. The respective outputs and outcomes in the project design as well as the matrix of priorities to be implemented in each of the participating countries reflect the results of national workshops, consultations and negotiations carried out in the participating countries and regional and international institutions, programs and projects during the PDF-B initiative. The activities and the interlinkages, as shown in Figure 3, have been designed to address priority issues, ongoing activities and commitments of countries and other stakeholders, as well as the capabilities and capacity needs of individual countries.

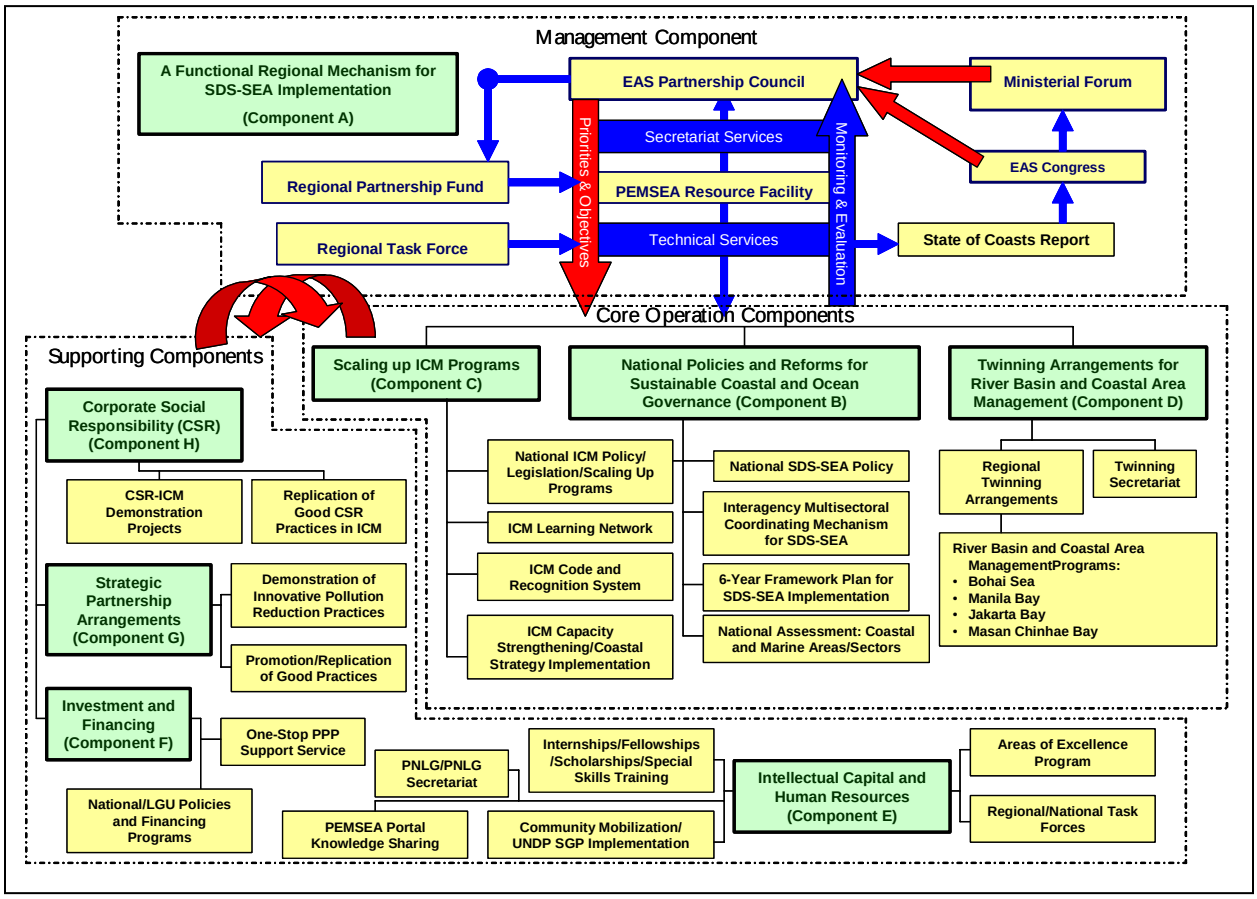


Figure 3: Project Components and their Linkages

MANAGEMENT CATEGORY

Immediate Objective 1: To catalyze the implementation of action programs of the SDS-SEA aimed at legal, policy and institutional reforms, and investments, at the local, national and regional levels, with a particular focus on scaling up and sustaining integrated coastal management (ICM) practices to reduce coastal and marine degradation.

COMPONENT A: A FUNCTIONAL REGIONAL MECHANISM FOR SDS-SEA IMPLEMENTATION

Outcome 1: An intergovernmental, multi-sectoral EAS Partnership Council, coordinating, evaluating and refining the implementation of the SDS-SEA, and advancing the regional partnership arrangement to a higher level.

Output A.1: A country-owned regional mechanism for SDS-SEA implementation

66. At the 11th intergovernmental Programme Steering Committee of the PEMSEA Regional Programme (August 2005), countries achieved consensus on three instruments that spelled out the modalities by which Governments and their Partners would interact and cooperate within a

regional partnership arrangement, namely: a) the Partnership Agreement for Implementation of the SDS-SEA; b) the Partnership Operating Arrangements for Implementation of the SDS-SEA; and c) a pro-forma Cost-Sharing Agreement (CSA) for country cash contributions to fund the PEMSEA Resource Facility (PRF) Secretariat Services to support the activities identified under the two previous instruments. Japan, RO Korea and PR China have started to provide financial support for the operation of the PRF Secretariat Services through the CSA mechanism.

67. The Partnership Agreement focuses on participating governments' commitments to priority targets under the SDS-SEA to the year 2015, the composition of the regional implementing mechanism, and a three-year action plan for countries, covering the period 2007-2010. The Partnership Agreement was signed by the respective Ministers of participating countries at the December 2006 Ministerial Forum in Haikou, PR China.

68. The Partnership Operating Arrangements detail the operating modality of an intergovernmental and multi-sectoral partnership, which has as its main objective the implementation of the SDS-SEA. The document identifies the roles and rights of partners, and the operating mechanisms by which partners will work together, including: a) the EAS Partnership Council (Council) as the governing body; b) the PEMSEA Resource Facility (PRF) providing secretariat and technical support services to the partners; c) the Regional Partnership Fund (RPF) receiving voluntary donations for building capacity to implement the SDS-SEA; and finally d) the EAS Congress, with the International Conference and the Ministerial Forum, becoming a triennial forum for monitoring and evaluating the implementation of the SDS-SEA, facilitating knowledge exchange, advocacy and multi-stakeholder participation, and providing policy direction and commitments for improving and strengthening the implementation of the SDS-SEA.

69. Component A will facilitate the start-up, operation, monitoring and evaluation, reporting, and sustainability of the regional partnership arrangement. The idea is to ensure that, by the end of 2010, there will be: a high level of participation and ownership for the regional partnership arrangement among all countries; key stakeholders will be represented in the Council and will be contributing to the work program and targets as adopted by the Council; the PRF Secretariat will be operating as an effective and highly professional coordinating, monitoring and evaluation arm of Council; and the partnership among countries and other stakeholders in the region will be providing the resources, skills and services required to sustain SDS-SEA implementation over the long-term.

70. Component A will also address the implementation of interlinkages among the different scales (i.e., regional, sub-regional, national and sub-national levels) and primacy of management interventions at these different scales, in order to accomplish adopted strategies, objectives and targets. The SDS-SEA framework and its ICM action program, will be the early focus of management interventions in areas where more detailed strategies and interventions have not been developed or adopted by national governments. When and where SAPs are endorsed by governments, SAP interventions would provide a further level of detail that would be pursued, in addition to any ICM/coastal strategy that might exist.

71. Effective monitoring and evaluation are recognized as vital tools in the development and management of the work program for SDS-SEA implementation. If done well, the information will provide countries, international and regional organizations, sub-regional programs, donors, the scientific community and the general public with information on:

- current conditions of marine and coastal resources;

- trends or changes that are occurring;
- the driving forces of these changes;
- the social, economic and environmental implications; and
- the responses of countries and other sectors as related to SDS-SEA implementation, as well as the effectiveness of such responses.

72. For this purpose, a regional State of Coasts reporting system will be developed and implemented by building onto, and adding value to, any existing reporting systems at the national and sub-regional levels.

Activities for Output A.1:

A.1.1 Formulate and facilitate the adoption and implementation of a rolling 6-year framework of partnership programs, covering the interlinkages among the different scales (i.e., regional, sub-regional, national and sub-national levels) and the primacy of management interventions at these different scales. Identify the gaps and disparities in capacities to achieve identified goals, and put together specific collaborative and mutually supportive arrangements among interested international, regional, sub-regional and country partners to enhance management interventions and impacts.

A.1.2 Establish a voluntary regional Partnership Fund as a support mechanism to reduce in-country and cross-country capacity disparities, for improved implementation of the SDS-SEA.

A.1.3 Put into operation a country-owned and sustainable PEMSEA Resource Facility (PRF) providing: a) secretariat services to the EAS Partnership Council; and b) policy and technical support services to participating countries and other stakeholders, including evaluation and transfer of good practices from and in collaboration with ongoing projects and programs especially those supported by GEF and other partners.

A.1.4 Organize and initiate the financing and operating arrangements for a triennial regional EAS Congress, including a Ministerial Forum, to serve as vehicle for countries to re-confirm their commitments to the implementation of the SDS-SEA, and as an International Conference to provide a medium for reporting, monitoring and evaluating the progress of SDS-SEA implementation.

A.1.5 Develop and put into action at the local, national, subregional and regional levels, a regular reporting system for the State of Coasts (SOC) report for the Seas of East Asia, to monitor progress and impacts of the implementation activities and programs within the framework of the SDS-SEA.

Output A.2: A Plan of Action for transforming PEMSEA into a country- and partner-owned, self-sustaining regional implementing mechanism for the SDS-SEA with a legal personality

73. A second major consideration of Component A is the evolution of PEMSEA into country- and partner-owned, self-sustaining regional mechanism operating outside of the UN framework with its own legal personality. A process and timeframe for the transformation will be developed, approved and initiated during this phase. PEMSEA is in a transition phase. The goal is to transform PEMSEA from a donor-funded, project-oriented regional initiative, into a country- and partner-supported, self-sustaining regional mechanism.

74. The transformation process of PEMSEA requires strategizing, consensus development and implementation, in close collaboration with the national and regional players. A process and timeframe have been approved by the country partners. The principal aims of the GEF-support are to provide the catalyst for the transformation and to ensure the sustainability of the regional mechanism. The first six years of the 10-year transformation period in which PEMSEA makes the transition require a strong guiding presence, which is not only sensitive to the political, economic and social characteristics of each of the country partners, but provides the network and capacity to facilitate access to policy-makers and decision-takers across the region.

Activities for Output A.2:

A.2.1 Identify and evaluate countries' perspectives regarding the benefits and constraints of different operating and administrative arrangements and facilitate consensus among countries regarding the transformation to a long term, self-sustaining regional implementing mechanism for the SDS-SEA.

A.2.2 Conduct a series of seminars/consultations involving pertinent national agencies and institutions to build consensus on a Plan of Action to create a long term, self-sustained regional mechanism.

A.2.3 Submit a Plan of Action to the EAS Partnership Council 2008 for endorsement to Governments.

A.2.4 Upon approval, initiate the implementation of the Plan of Action, including among others, preparation of working documents for the PEMSEA transformation.

INDICATORS OF SUCCESS: COMPONENT A

- A PEMSEA Partnership Council fully functional, and recognized regionally and internationally as a model partnership arrangement and implementing mechanism for the sustainable development and management of the Seas of East Asia;
- A self-sustaining PEMSEA Resource Facility completely operational, providing secretariat services to the Council, the EAS Congress and pertinent regional networks, delivering policy, technical and scientific advice and support, and capacity building to PEMSEA countries and their partners on a cost-recovery basis, with a full range of pertinent services and specialized skills, reducing disparities in capacities within and among PEMSEA countries and fast-tracking SDS-SEA implementation;
- A tri-annual EAS Congress, serving as the principal forum for multi-stakeholder, multi-sectoral review and evaluation of the progress of SDS-SEA implementation, providing a springboard for innovative partnerships and collaborative, integrated approaches to bridge the gap between sustainability and productivity;
- A regional Partnership Fund, governed by the PEMSEA Partnership Council, channeling voluntary contributions from countries, international agencies, donors, institutions and individuals to SDS-SEA activities in lesser developed areas of the region, creating social, economic and environmental benefits through environmental infrastructure development and biodiversity conservation and rehabilitation projects at the local level; and
- A rolling 6-year regional partnership program, involving countries, their partners and collaborating international, regional and sub-regional institutions, organizations and projects, and facilitating the implementation of interlinkages among adopted

management interventions across related projects and programs at different political, geographical and ecological scales;

- A Regional State of Coasts report published and submitted to the EAS Congress 2009.
- Plan of Action initiated to transform PEMSEA into a self-sustaining regional mechanism for SDS-SEA implementation with its own legal identity.

CORE OPERATIONS CATEGORY

COMPONENT B: NATIONAL POLICIES AND REFORMS FOR SUSTAINABLE COASTAL AND OCEAN GOVERNANCE

Outcome 2: National policies and programs on sustainable coastal and ocean development mainstreamed into social and economic development programs of participating countries

Output B.1: An agreed framework, methodology and indicators for social and economic contributions of coastal and marine areas/sectors developed and demonstrated in two countries of the region.

75. The current situation in many countries of the region, as determined in the baseline assessment, is that the value and benefits derived from the coastal and marine sector are not fully recognized by decision-makers, and the costs of such oversight have not been fully appreciated. Thus, the focus of this activity is to develop and implement innovative approaches designed to raise coastal and ocean governance issues on the political agenda of participating countries.

Activities for Output B.1:

B.1.1 Organize a Regional Task Force to facilitate consensus among national and international stakeholders on a framework, methodology and appropriate indicators for assessing social and economic contributions of coastal and marine areas/sectors within the East Asian region.

B.1.2 Facilitate the conduct of at least two national assessments of the social and economic contributions of coastal and marine areas/sectors in participating countries.

B.1.3 Organize a regional forum for senior managers and policy-makers at the EAS Congress 2009, covering social and economic contributions of coastal and marine areas/sectors and promoting policy reforms for strengthening coastal and ocean governance.

Output B.2: National policy, legislative and institutional reforms, and interagency and multi-sectoral coordinating mechanisms aimed at improved integrated management of marine and coastal areas.

76. The SDS-SEA includes four key action programs that provide direction for improving coastal and ocean governance at the national level, namely:

77. Under the PROTECT strategy:

a. enhancing the awareness of policymakers on the social, economic and environmental costs incurred as a consequence of degraded marine and coastal ecosystems and related watershed areas;
b. strengthening capabilities to protect the marine environment from the harmful effects of land-based activities by mainstreaming integrated coastal area and watershed management strategies and policies across levels of government, government agencies, river basin authorities, port authorities and coastal area managers;
c. incorporating the aims, objectives, and guidance provided by international conventions and agreements, such as UNCLOS, Agenda 21, and GPA, into new and existing strategies, policies, and programs of action at the local, national and regional levels; and

78. Under the IMPLEMENT strategy:

d. establishing national intersectoral, interagency, and interdisciplinary mechanisms to organize, coordinate and manage the implementation of identified common actions and adopted strategies and policies.

Activities for Output B.2:

B.2.1 Promote and facilitate two (2) participating countries to develop, adopt and implement, and three (3) countries to initiate:

a. national SDS-SEA policy and national multi-sectoral and interagency coordinating mechanisms for the implementation of the SDS-SEA; and
b. 6-year framework plans for the implementation of the SDS-SEA, including ICM scaling-up programs, strategies, time-bound management targets, priority actions and implementing arrangements for the implementation of SDS-SEA, in consultation with stakeholders.

B.2.2 Organize a regional workshop for policymakers and senior managers on the progress, benefits and challenges being faced by countries in the development and implementation of national policies and institutional reforms regarding integrated management of marine and coastal areas at the EAS Congress 2009.

INDICATORS OF SUCCESS: COMPONENT B

- Two countries prepare and publish assessment reports on the significance of social and economic contributions of coastal and marine sectors/areas to national GDPs;
- National policies and action plans for sustainable ocean and coastal development adopted and/or initiated in at least 5 PEMSEA countries by 2010;
- Interagency and multisectoral coordinating mechanisms operating in at least two countries, improving coherence in coastal and ocean policy, legislation, regulation and enforcement at local and national levels;
- A 6-year framework of national programs supporting SDS-SEA implementation, initiated in two countries.

COMPONENT C: SCALING UP ICM PROGRAMS

Outcome 3: Integrated coastal management (ICM) scaled up as an on-the-ground national framework for achieving sustainable development of coastal lands and waters

Output C.1: Institutional arrangements for national ICM programs in place

79. Integrated coastal management (ICM) is a globally acknowledged framework for addressing transboundary, cross-sectoral environmental management issues, as well as broader sustainable development needs in coasts and seas. Major regional efforts to develop coastal resource management programs began in 1985 with a regional aid project of USAID to ASEAN. In 1992, a number of other coastal resource management projects were started in Southeast Asia, with the support of USAID and other donors and financial institutions, including Asian Development Bank and the World Bank. Many of these projects were developed primarily to protect and conserve coastal and marine ecosystems and to promote the sustainable use of the resources they support. The projects were implemented under various generic names, such as coastal resource management (CRM), integrated coastal zone management (ICZM), community-based management (CBM), integrated coastal area management (ICAM), co-management, and others. While the emphasis of these projects may have differed, the fundamental concept, guiding principles, approaches, and subject coverage were basically similar.

80. Over the past decade, PEMSEA successfully assisted 8 local governments of the region to establish national ICM demonstration sites. These sites subsequently provided ICM working models and training grounds for ICM programs, which promoted the start-up of locally funded ICM programs in 18 coastal areas in the region. PEMSEA's efforts involving 8 ICM demonstration sites and 18 ICM parallel sites cover only 0.9% of the region's coastline. Furthermore, these numerous coastal management efforts have not been able to prevent or effectively stop further deterioration of environmental conditions in coastal areas. Simply speaking, the current level of effort in ICM cannot cope with the pace of environmental degradation and resource depletion, undermining the very foundation of economic prosperity and social well-being of the region. In response, this component takes a more strategic and coordinated effort to put programs in place at the national level, to better coordinate and scale up efforts at the local level.

Activities for Output C.1:

C.1.1 Organize "Leadership Forums on ICM" in five (5) countries to mobilize national policymakers, local leaders and coastal managers to recognize the benefits, and support the development of national ICM policy, legislation and programs.

C.1.2 Facilitate two (2) participating countries to develop, adopt and implement, and three (3) participating countries to initiate: a) national strategies/policies/legislation for ICM programs; b) 6-year action plans for ICM implementation, with time-bound management targets and implementing arrangements, as part of the overall SDS-SEA implementation plan.

C.1.3 Set in place a systematic process for monitoring, evaluating and reporting the effectiveness of national and local ICM programs, with regard to agreed targets, schedules and indicators, in collaboration with concerned national and local governments.

Output C.2: Capacity building strengthened for local government ICM programs

81. The SDS-SEA contains a DEVELOP strategy and action program to strengthen ICM as an effective management framework for achieving sustainable development of coastal and marine areas in the region. In effect, what is called for in the Strategy is to advance to a new level of ICM program implementation. Past initiatives have focused on development, demonstration and establishment of ICM working models in collaboration with selected national and local governments. The GEF project will set in place national ICM programs to facilitate scaling up of ICM within countries, by building on the core of available knowledge and experience of ICM demonstration projects and those of other ICM initiatives.

Activities for Output C.2:

C.2.1 Augment existing ICM sites that can be used as working models in support of their respective national ICM scaling up programs.

C.2.2 Set up ICM learning networks and ICM training programs in three (3) countries confirming institutional and administrative support from national governments, donors and international organizations, targeting the sharing of knowledge and transfer of skills regarding ICM program development and implementation to different levels of government and various sectors of society, including national and local leaders, ICM managers, local level practitioners and community groups, and NTF members.

C.2.3 Develop/update PEMSEA ICM training manuals, practical guides and case studies, and organize/facilitate the conduct of training-of-trainers and training of NTF members at the regional and national levels, and training of ICM managers and implementers at the sub-national level.

C.2.4 Develop an "ICM Good Practices Award", in order to recognize local governments that have displayed commitment and achievement in the implementation of ICM programs and serve as good examples for other local governments in the region.

Output C.3: An ICM Code adopted by national and local governments for voluntary use as a standard for certification/recognition of ICM sites

82. PEMSEA's experience over the past 12 years indicates that there are several key elements in ICM, which are basic to achieving sustainable coastal management programs. These are:

a. multi-sectoral and interagency coordination;
b. policy and functional integration;
c. stakeholders consultation and participation;
d. institutional and legal arrangements;
e. local capacity to plan and manage; and
f. sustainable financing mechanisms.

83. Not all coastal management initiatives are able to incorporate these core elements into their methodologies and outputs. Thus, the effectiveness and sustainability of coastal management programs, and the scaling up and replication of good coastal management practices, remains an uncertainty and a challenge for national and local governments in the region.

84. The ICM Code will provide the core elements and requirements of an effective coastal management system. The Code takes into account the elements of ISO 14001 (Environmental Management) and ISO 9001 (Quality Management), and the legal requirements that local governments must abide by, as well as any significant environmental, social and economic aspects of marine and coastal governance as experienced at the local level. Supporting materials and training programs will be prepared to guide local governments through the ICM Code application.

85. The ICM Code will be applicable to all types and sizes of local governments, and will accommodate the diverse geographical, cultural, political and social conditions of the region. It will be designed as a generic framework, which can be implemented by any local government

Activities for Output C.3:

C.3.1 Develop and test an ICM Code, audit guide and training program using national ICM demonstration sites for testing and refinement of all materials and application processes.

C.3.2 Develop and test the ICM Certification/Recognition system, in collaboration with national governments, the PNLG, donors, and other concerned stakeholders.

Output C.4: A PSHEM Code adopted and implemented by national governments and the private sector for voluntary use by port authorities and those companies operating in a port as a standard for certification/recognition of a Port Safety, Health and Environmental Management System (PSHEMS)

86. Ports and harbors are an integral part of the majority of coastal communities of the East Asia region. They serve as the center of economic development and activity and as the doorway to domestic, regional and international markets. Port authorities and operators face a number of challenges with respect to their role and impact in ICM programs and sustainable development of coastal areas. The development and adoption of international safety, environment and security standards by global bodies such as IMO and ILO have emphasized that an effective management system must not only encompass operational activities, but also build quality, safety, health and environmental objectives and procedures into each process.

87. Over the past two years, PEMSEA, with financial support from IMO, and in collaboration with a number of international associations and organizations having mandates in the effective management and efficient operation of ports and harbors, has been involved in the development and demonstration of a Port Safety, Health and Environmental Management (PSHEM) Code. The PSHEM Code is aimed at providing port authorities or any other company operating within the port, whose activities may have an effect on the health and safety of people, environment, cargoes, and port installations, with a standard against which to measure the performance of its operations. The Code is based on key elements of recognized international standards, namely ISO 9001 (Quality Management), ISO 14001 (Environmental Management), and OHSAS 18001 (Occupational Health and Safety).

88. This component will address scaling up of the PSHEMS (PROTECT and IMPLEMENT strategies of SDS-SEA), within the context of national ICM programs, through the promotion and adoption of the PSHEM Code by national governments, port authorities and port operators. As a further step toward region-wide application, Output C.4 will establish linkages with the private sector and donors to promote the benefits of a comprehensive approach to port operations and

environmental management, and to generate funding for the implementation of the PSHEMS Certification/Recognition System in selected ports.

Activities for Output C.4:

C.4.1 Solicit international recognition of the PSHEM Code developed through IMO, ILO and other international agencies, authorities and associations with concerns/focus on port development and operations.

C.4.2 Implement a PSHEMS training program at three (3) selected ports, while building a capacity within the region to provide technical support/training in PSHEMS development.

C.4.3 Develop and implement the PSHEMS Certification/Recognition System, in collaboration with national governments, private sector, donors, and other concerned stakeholders.

INDICATORS OF SUCCESS: COMPONENT C

- National ICM policies/legislation and 6-year ICM scaling up action plans adopted and initiated in 5 countries;
- At least 5% of the coastlines of the region covered by ICM programs by 2010;
- ICM Learning Networks set up and operating in 3 countries;
- ICM Code and PSHEMS Code and Recognition System providing incentives for local government units and port authorities to develop and implement integrated management systems;
- National ICM Task Forces operating in 4 countries.

COMPONENT D: TWINNING ARRANGEMENTS FOR RIVER BASIN AND COASTAL AREA MANAGEMENT

Outcome 4: South-south and north-south twinning arrangements established for integrated management of watersheds, estuaries and adjacent coastal seas, promoting knowledge and experience sharing and collaboration for the implementation of management programs in environmental hotspots of the region

Output D.1: Regional twinning arrangements developed and implemented for site-specific river basin and coastal area management programs

89. The persistent degradation of coastal-marine systems has prompted a call for an an integrated and ecosystem-based approach to managing human activities, which focuses on the entire ecosystem, including the people who live there. Ecosystem-based management is designed to restore and sustain the health, productivity, resilience, and biological diversity of watersheds and related coastal and marine systems and promote the quality of life for humans who depend on them. Grounded in science, it defines management regimes on the basis of ecological, rather than political boundaries and addresses ecological, social, and economic goals.

90. Ecosystem-based management is highlighted in the SDS-SEA, particularly in the SUSTAIN and PROTECT strategies. Actions called for in the strategies include: a) strengthening the compatibility and balance of fresh water and marine water uses; b) incorporating water quality elements into watershed, coastal and marine management

programs; c) forging partnerships among governments, international agencies, donors, the private sector, and other concerned stakeholders to reinforce capabilities in environmental management; and d) addressing impacts of land-based activities within the framework of integrated coastal and watershed management, including the protection of rivers and tributaries, and promotion of good practices in land and water uses at the regional, national and sub-national levels. In addition, as a consequence of country consultations during the PDF-B project, the following concerns were highlighted regarding the current state of ecosystem-based management in the region, in response to the actions identified in the SDS-SEA:

a. The lack of capacity building measures to increase the understanding and appreciation of the concept of ecosystem-based management;
b. The need to compile lessons learned and good practices, to help countries strengthen their programs and initiatives; and
c. Insufficient knowledge, infrastructure, and funding to implement modern and sophisticated processes to address pollution and other problems that cause the deterioration of the coastal and marine environment.

91. This component of the GEF project will address the action programs for developing stakeholder participatory management mechanisms across legal and administrative boundaries, covering both upstream and downstream activities and impacts of watersheds and catchments as identified in the SDS-SEA. During this process, sustainable financing mechanisms and investment opportunities for pollution reduction will be identified and facilitated. By establishing twinning arrangements among priority sites within the region, as well as with developed sites outside of the region, countries will be provided with better opportunities for knowledge sharing and technical cooperation in managing river basins, coastal areas and coastal seas in an integrated fashion.

92. The priority sites to be considered in the twinning arrangement will include three sites that have been developed coastal strategies and established priority action programs, as part of the PEMSEA Regional Programme (i.e., Bohai Sea; Manila Bay; Gulf of Thailand), one site that has been implementing a comprehensive environmental management plan for a number of years (i.e., Masan-Chinhae Bay), and one site that is just beginning the process of planning and developing its restoration and sustainability program (i.e., Jakarta Bay). Other areas with fully developed management programs, including Chesapeake Bay (USA) and Seto Inland Sea (Japan), will be invited to participate in the twinning program, to serve as knowledge centers for river basin and coastal area management.

Activities for Output D.1:

D.1.1 Consult with potential candidate sites regarding their interests to participating in the proposed twinning activities, negotiate and sign MOAs/MOUs or similar agreements for twinning among the developing and developed sites to facilitate knowledge sharing and transfer of technology in river basin and coastal area management, covering specific activities such as capacity building and training, staff exchanges, internships/on-the-job training, study tours/site visits, technology transfer, and technical cooperation and assistance.

D.1.2 Set up a regional Twinning Secretariat as part of the PRF Secretariat to coordinate and facilitate activities across the sites, including the organization of an annual workshop.

D.1.3 Formulate and initiate the implementation of site-specific river basin and coastal area management programs addressing priority issues at selected hotspot sites, as follows:

a. a management program in accordance with the Bohai Sea Sustainable Development Strategy (BS-SDS), focusing on a selected watershed area and addressing water pollution reduction and related financing and investment options;
b. the Manila Bay Coastal Strategy, covering integrated watershed and coastal area management, the implementation of the Clean Water Act, and focusing on an investment plan for sewage and sanitation facilities and services in the Pasig River-Laguna de Bay watershed, in collaboration with the World Bank/GEF Manila Third Sewerage Project;
c. the Gulf of Thailand Joint Statement/Framework Programme initiated with a sub-regional institutional arrangement development/agreement among the three (3) signatory countries and partnerships forged with industry/private sector for capacity enhancement in oil spill prevention, preparedness and response;
d. an integrated and ecosystem-based management strategy and operational plan formulated and adopted for a selected watershed and coastal area within Jakarta Bay; and
e. Case studies on the experience and lessons gained from the development of a total pollution load management (TPLM) plan for Masan-Chinhae Bay prepared and disseminated.

D.1.4 Promote and expand twinning arrangements to other priority watershed areas/sub-regional pollution hotspots, such as the Mekong River, Red River, Pearl River, and Jiulongjiang River.

D.1.5 Organize one regional workshop involving the twinning sites, twinning partners, and other interested stakeholders during the EAS Congress 2009 to review and evaluate the results of the twinning activities, and the potential for replication in other areas.

INDICATORS OF SUCCESS: COMPONENT D

- Integrated river basin and coastal area management programs employing an ecosystem-based approach and other tools as appropriate in the Bohai Sea, Jakarta Bay, Manila Bay, Masan-Chinhae Bay, and other areas;
- Investment/replication plans for pollution reduction facilities and services developed and adopted for selected river basins in Bohai Sea, Manila Bay and Jakarta Bay;
- Twinning and networking arrangements involving South-South and North-South collaborations negotiated and signed in at least two priority watershed sites;
- Twinning Secretariat established and fully operational, organizing and conducting annual workshops, site visits and other knowledge transfer events among a regional network of river basin and coastal area management projects and programs.

SUPPORTING ACTIVITIES CATEGORY

Immediate Objective 2: To verify, disseminate and promote the replication of lessons and best practices arising from the regional partnership arrangements in collaboration with GEF IW: Learn and other partners.

COMPONENT E: INTELLECTUAL CAPITAL AND HUMAN RESOURCES

Outcome 5: Use of the region's intellectual capital and human resources strengthened, and addressing policy, economic, scientific, technical and social challenges and constraints to integrated management and sustainable use of the marine and coastal environment and resources of the Seas of East Asia

93. The SDS-SEA emphasizes the importance of turning knowledge and concern about the coastal and marine environment into on-the-ground actions, by raising awareness and mobilizing the strengths and capacities of scientific institutions, local communities, environmental organizations, women's groups, religious organizations, indigenous people, and the private sector (DEVELOP and COMMUNICATE strategies).

94. The GEF project will focus on capacity development of diverse stakeholders, including national and local governments, scientific institutions, community members, NGOs, the private sector and others who are involved in sustainable ocean development in the region, through formal education and training, as well as providing hands-on experiences and knowledge sharing. Special focus will be given to applying innovative knowledge management strategies and tools to effectively utilize PEMSEA's intellectual wealth on ocean and coastal governance accumulated in the past 12 years. To affect the full use of information technology (IT) as a vital tool in sustainable development programs at the local, national and regional levels (COMMUNICATION strategy), linkages will be strengthened with the GEF IW:Learn project, in order to facilitate the transfer of knowledge and good practices in ICM across the East Asian region, and to other regions in which the GEF IW program is operating.

Output E.1: An enhanced technical support network for countries, comprised of a Regional Task Force (RTF) and country-based National Task Forces (NTF)

95. The RTF, which was first established under the PEMSEA Regional Programme, will be updated and expanded to provide technical assistance and support services covering SDS-SEA implementation. The expanded responsibilities of the RTF will include: (1) technical assistance for project planning and implementation at the regional, sub-regional, and national levels; (2) technical advice in the preparation of national strategies and policy reforms, formulation of national and regional State of Coasts reporting systems, development and implementation of an ICM Code and Recognition System, ecosystem-based management approaches, and monitoring and evaluation of project and program outputs; and (3) resource persons in national and regional workshops, seminars, and training-trainers programs.

96. The NTF coverage will include, among others: ICM policy, implementation programs and monitoring and evaluation of ICM programs, and the preparation of national State of Coasts reports. NTF membership will be drawn from national institutions and other organizations, as well as local government agencies, with experience in the implementation of ICM. Appropriate institutional linkages and support mechanisms will be set up in coordination with the concerned national and local governments and institutions.

Activities for Output E.1:

E.1.1 Set up a systematic mechanism for the mobilization of the RTF and NTFs, putting in place appropriate incentive and recognition systems, codes of conduct, and training and evaluation programs.

E.1.2 Identify a core of individuals in participating countries with ICM experience to serve as members of NTFs, which will focus primarily on the development and implementation of national ICM scaling up programs.

E.1.3 Build and update the capacity of RTF and NTF members in response to country needs, by conducting training workshops, training of trainers, on-the-job experience, and staff exchanges to provide practical experience and develop qualified NTF members into RTF members.

E.1.4 Facilitate the use of RTF and NTF members in national and regional training workshops, and in facilitating the implementation of SDS-SEA at the local, national and sub-regional levels.

Output E.2: Areas of Excellence (AOEs) Programs and a regional network of universities/scientific institutions supporting SDS-SEA implementation at the national and local levels

97. Partnership arrangements will be forged with internationally and regionally recognized AOEs, engaging these organizations and institutions in the implementation of the SDS-SEA through a PEMSEA Program for Areas of Excellence. The program will facilitate AOE input into improved awareness and understanding of coastal and marine ecosystems and their linkages with human activities, promotion of sound public policies and decision-making regarding sustainable development, application of scientifically sound technologies and practices in management interventions, and facilitation of linkages among the scientific community, government, people, business and the environment, within the framework of the SDS-SEA.

98. Through the operation of the PEMSEA Programme for Areas of Excellence, the GEF project will strengthen the connection between scientific institutions, such as the Center for Marine Environmental Research and Innovative Technology (MERIT) at the City University of Hong Kong City and Marine Science Institute (MSI) at the University of the Philippines, and decision-makers in government and at the community level, promoting the use of scientific knowledge and innovative technologies in support of coastal strategy implementation.

Activities for Output E.2:

E.2.1 Negotiate partnership agreements with two (2) internationally and regionally recognized Areas of Excellence that will provide scientific and technical inputs to the implementation of SDS-SEA at the national and regional levels, such as: monitoring changes in the marine environment; habitat restoration and rehabilitation; and ocean policy and international conventions.

E.2.2 Build linkages with national universities and donors to augment scientific support for ICM/ecosystem-based management of watersheds and coastal areas at the national and sub-national levels.

E.2.3 Develop a reporting and information-sharing system to disseminate the outputs of the AOE Programme and networking of universities.

Output E.3: Professional upgrade program, graduate scholarships and specialized training courses

99. With the proposed developments in regional partnership arrangements, national policy reforms, scaling up of integrated coastal management programs, application of innovative financing mechanisms, social and economic assessments of marine sectors, and so on, there is a need to accelerate professional upgrading initiatives. A three-pronged professional upgrading program (i.e., regional and international internships; fellows; and specialized training) will provide a select group of outstanding individuals with the opportunity to acquire exposure in these important areas, and others, in concert with SDS-SEA implementation.

100. This component of the Project will complement the capacity building efforts for ICM scaling-up, including the improvement of the ICM training manual and ICM learning network and training programs, as described in Outputs C.2 and C.3.

Activities for Output E.3:

E.3.1 Delineate eligibility criteria, procedures and conditions regarding regional and international internships, fellowships/senior fellowships, and specialized training opportunities within PEMSEA, as well as among PEMSEA Partners, AOEs, and collaborating institutions. Establish linkages with institutions granting graduate degree programs in order to facilitate fellowships to deserving individuals in participating countries, who are committed to serve as RTF and/or NTF members upon their return.

E.3.2 Facilitate the development of a post-graduate ICM curriculum with selected universities in the region.

E.3.3 Organize specialized training courses at the national and sub-regional levels (i.e., environmental risk assessment; coastal use zoning; natural resource damage assessment; and IIMS development/application) to develop the necessary human resources for implementation of the SDS-SEA.

E.3.4 Monitor and evaluate the effectiveness of professional upgrading, graduate scholarships, and specialized training courses programs in facilitating the implementation of the SDS-SEA, in accordance with agreed criteria, conditions and impact indicators.

Output E.4: An internet-based information portal in place, building awareness and transferring knowledge and lessons learned, in collaboration with GEF IW-Learn

101. Two effective tools for e-learning and knowledge sharing have been established in the region. PEMSEA's website has been developed as a main portal for disseminating technical, scientific and policy information, as well as for maintaining updated information on current activities in the region. It is widely used by professional, scientific and management sectors, as well as the public, with over 3 million hits in 2006. Likewise, the Integrated Information Management System (IIMS) has been developed and implemented at a number of ICM and hotspot sites as an environmental database for local governments. It offers comprehensive support for gathering information, analyzing data, and providing reports that are understandable and useful to local policymakers, managers, scientists, and the public.

102. This component will build upon these two valuable tools, while strengthening the linkage with and the use of innovative technologies and software developed by the GEF IW-Learn

project. The ultimate goal is to increase the awareness and replication of good practices in ICM by local governments throughout the region, and to share this knowledge with other regions.

Activities for Output E.4:

E.4.1 Strengthen PEMSEA's portal (www.pemsea.org) as an information node on the PEMSEA regional partnership arrangement, to become a one-stop shop for awareness building, knowledge transfer and learning regarding national ICM scaling up programs and local, national and international contributions/lesson learned in SDS-SEA implementation, in collaboration with GEF IW Learn.

E.4.2 Develop and implement information dissemination and knowledge sharing systems using four principal channels:

a. the GEF website, IW:LEARN, as GEF's pre-eminent communication/ dissemination tool in its International Waters program;
b. the EAS Congress, which is the paramount regional event of the EAS Partnership Council for monitoring, reporting and evaluating progress;
c. the knowledge-sharing, training, investment and IIMS networking components of the PRF; and
d. international and regional conferences, meetings and workshops organized by partners/collaborators, including the biennial GEF IW Conference, addressing sustainable development and coastal and ocean governance issues.

Output E.5: Community based projects, including those addressing supplementary livelihood opportunities, developed and implemented at ICM sites throughout the region in partnership with GEF/UNDP Small Grants Programme and other community-based donor programs

103. Building environmentally aware, capable and committed groups within civil society enhances consultation, coordination, and eventually, integration with the efforts of government agencies, to bring about sustainable coastal development. PEMSEA's experience in providing women, youth and other marginalized groups within the community with appropriate environmental training and information, and employment opportunities, helps to reinforce their roles as key players in the application of sustainable development values and techniques. This leads to more sustainable development and a healthier local environment.

104. On this basis, the COMMUNICATE strategy of the SDS-SEA focuses on action programs aimed at:

a. increasing awareness and understanding of coastal and marine environmental and resource management issues;
b. providing opportunities for active engagement in meaningful initiatives; and
c. mobilizing target groups to action.

105. This project component focuses on the enhancement of community awareness and participation in ICM. The strategy is to develop and utilize the inherent capacities of women, the youth, indigenous people and other marginalized groups in the development and implementation of livelihood enhancing projects that support the implementation of local ICM program, and that, in themselves, are sustainable and replicable. The project component will involve close cooperation with the GEF Small Grants Programme and other similar donor-

funded programs, which focus on social development and sustainability issues. The local ICM program will provide the vehicle and means to facilitate the development and implementation of the value-added community-based resource management and livelihood enhancement projects. The GEF support will ensure that the results of such activities are packaged and disseminated to a wide audience, including the EAS Congress, thereby encouraging replication of good practices.

Activities for Output E.5:

E.5.1 Build partnerships/working arrangements with donor-supported programs in each country, including the GEF Small Grants Programme (SGP) and other donor programs, which cater to capacity building of community groups and marginalized sectors of society.

E.5.2 Within the framework and capabilities of local ICM programs, assist with the preparation and submission of projects proposals to donor programs aimed at mobilizing community groups in the implementation of coastal strategies and actions plans.

E.5.3 Facilitate capacity building activities for community groups, as well as sharing of hands-on experience in community-based coastal resource management, especially small-scale fisheries initiatives in support of site-specific coastal strategies and action plans.

E.5.4 Organize national and regional forums for NGO/community groups to transfer experiences and knowledge on community-based resource management, the challenges, benefits and lessons learned.

Output E.6: A self-sustaining regional network of local governments in place, operating and committed to achieving tangible improvements in the sustainable use and development of marine and coastal areas through ICM practices

106. Recognizing the importance of a local government voice to the development and implementation of ICM programs at the national and regional levels, PEMSEA launched the Regional Network of Local Governments (RNLG) in 2001. In 2005, the local government members adopted a resolution on the establishment of a self-sustaining PEMSEA Network of Local Governments (PNLG), and strengthening the role of the network. The member local governments signed a PNLG Charter in December 2006. The aim of this component is to assist the new organization in the early stages of program development and implementation, and set it on its way as a facilitator and advocator of local government implementation of ICM programs.

Activities for Output E.6:

E.6.1 Assist the PNLG is organizing capacity enhancing seminars and workshops as part of its annual meetings, to cover issues of key interest to the membership, such as environmental investments, natural and man-made disaster management, community participation, ICM recognition; etc.

E.6.2 Provide technical support to the Xiamen Municipal Government in initiating the operation of the PNLG Secretariat.

E.6.3 Strengthen the Xiamen Municipal Government role/capacity in regularly organizing “Oceans Week” as an international event involving local governments from around the globe.

INDICATORS OF SUCCESS: COMPONENT E

- A Regional Task Force providing technical and scientific advice and developing capacities at the national and sub-regional levels in special skills and applications for ICM and river basin and coastal area management projects and programs;
- Two Areas of Excellence programs within existing research institutions and institutions of higher learning in the region, providing expert advice and support to PEMSEA countries and their partners on specific topics of concern, enhancing the region's intellectual capital by accelerating research, education and training, and leading the region's scientific community in conducting multidisciplinary scientific research to address uncertainties relative to SDS-SEA implementation programs;
- 10 special skills training workshops, 3 internships/senior fellowships and one ICM post graduate ICM curriculum developed, adopted and implemented;
- PEMSEA website established and operating in accordance with IW-LEARN guidelines, disseminating information and lessons learned to regional and global stakeholders in the GEF IW focal area;
- At least 6 site-specific, community-level collaborative projects developed and implemented to strengthen community participation in river basin and coastal area management projects/programs with GEF UNDP SGP support;
- Self-sustaining regional PNLG operational, and advocating/supporting ICM scaling up initiatives at the country and regional levels;
- World Oceans Week organized and conducted regularly in Xiamen.

Immediate Objective 3: To develop and coordinate strategic partnership arrangements between participating governments, international agencies, organizations and financial institutions, regional programs and projects, donors, the private sector and other stakeholders to stimulate public and private sector investments in sustainable coastal development and environmental infrastructure projects and services.

COMPONENT F: PUBLIC AND PRIVATE SECTOR INVESTMENT AND FINANCING IN ENVIRONMENTAL INFRASTRUCTURE PROJECTS AND SERVICES

Outcome 6: Public and private sector cooperation achieving environmental sustainability through the mobilization of investments in pollution reduction facilities and services.

107. The PROTECT strategy of the SDS-SEA calls on local and national governments to implement management programs to combat the impacts of sewage, physical alteration of habitats, nutrients, sediment mobility, litter, and persistent organic pollutants by:

- introducing innovative policy, management, and institutional arrangements at the local level, including economic instruments and incentive programs to encourage participation and partnerships among local government, the private sector and civil society; and
- enhancing access by local governments to technical assistance, technology transfer and financing programs and to formulate and negotiate self-sustaining partnership arrangements with the private sector, investors and financial institutions.

Output F.1: Innovative national investment and financing policies and programs for public and private sector investment in pollution reduction facilities

108. This component of the project will build upon the initiatives of the GEF MSP/PPP project, and work in collaboration with the World Bank (GEF/World Bank Partnership Investment Fund), UNEP-GPA, and other programs and projects in the region that are developing and testing innovative approaches to strengthening public and private sector investment in environmental infrastructure. The project will promote and facilitate changes in investment and financing policies, programs and capacities at the national and sub-national levels to enhance public and private sector investments in environmental facilities and services.

Activities for Output F.1

F.1.1 In conjunction with ICM scaling up initiatives (Component C) and river basin and coastal area management projects (Component D), package, promote and facilitate the adoption and implementation of:

a. policy reforms covering procurement processes, financing programs, investment mechanisms, and incentives which facilitate increased participation by the private sector in the provision of public sector services, including water supply, waste management and pollution reduction programs;
b. innovative economic instruments, which support the conversion of public utilities (i.e., water, sewerage and waste management facilities and services) from wholly-owned, financed and operated public services to mixed ownership (public and private sector), market-based services;
c. alternative revenue generating schemes (e.g., carbon credits; environmental user fees) to enhance the financial viability and sustainability of pollution reduction investment projects; and
d. appropriate institutional mechanisms at the local government level to provide for the participation of civil society in the planning, development, monitoring and evaluation of required environmental services to the different sectors of the community.

F.1.2 Formulate and demonstrate methodologies for preparing integrated river basin-coastal area management investment plans focused on pollution reduction, for adoption and use by local governments, the private sector, financial institutions and other concerned stakeholders, particularly with respect to the replication and scaling up of innovative technologies and practices (Component G).

F.1.3 Establish a one-stop PPP Support Service for local governments, the private sector, financial institutions, and other interested stakeholders, in collaboration with Strategic Partners, to promote and facilitate increased private sector participation in investment projects for pollution reduction at ICM sites and in river basin and coastal area management programs.

INDICATORS OF SUCCESS: COMPONENT F

- National/sub-national reforms in financing and procurement policies, regulations and processes, enhancing financial investments in water, sewage and sanitation facilities and services by governments and the private sector, adopted by at least two governments;
- Investment plans developed and initiated in two (2) river basin and coastal area management sites, providing new investment/replication opportunities in small cities, municipalities and secondary townships for environmental infrastructure improvement projects;

- A one-stop PPP Support Service for local governments, the private sector, financial institutions, and other interested stakeholders facilitating private sector participation in investment projects for pollution reduction at ICM sites and in river basin and coastal area management.

COMPONENT G: STRATEGIC PARTNERSHIP ARRANGEMENTS

Outcome 7: A Strategic Partnership for the Sustainable Development of the Seas of East Asia, functioning as a mechanism for GEF, the World Bank, the UNDP, and other international and regional partners to incorporate and coordinate their strategic action plans, programs and projects under the framework of the SDS-SEA, thus promoting greater sustainability and political commitment to the effort.

Output G.1: A functional Strategic Partnership arrangement facilitating enhanced communication, knowledge sharing, scaling up and replication of innovative technologies and practices in pollution reduction across the LMEs of East Asia.

109. The PROTECT strategy of the SDS-SEA recommends the adoption of a holistic approach to managing land-based activities and their negative impacts on the sustainability of coastal and marine resources. In particular, the strategy calls on national and local governments, regional programs and projects, international agencies and organizations, and international financial institutions to:

- incorporate intergovernmental initiatives in environmental management of river basins, sub regional sea areas and LMEs into a management framework for regional seas;
- support an integrated management approach to coastal and ocean governance at the local, national and regional levels, thereby facilitating the acceleration of management programs;
- work with international financial institutions, regional development banks, international donors, and other financial mechanisms to facilitate and expeditiously finance environmental infrastructure and services.

110. The Strategic Partnership for the Sustainable Development of the Seas of East Asia is designed to facilitate the effective implementation and interaction of two GEF-supported projects in the region, namely the *GEF/UNDP Implementation of the SDS-SEA*, and the *World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia.* The UNDP project aims to scale-up ICM programs across the region, covering more than 20% of the coastline by 2015. An important component of ICM implementation is improved governance of coastal and marine resources, resulting in the development and implementation of local initiatives to reduce pollution and the resulting destruction and degradation of land areas, rivers and coastal waters (Components B, C and D). In parallel, the project managed by the World Bank, aims to reduce pollution discharges by leveraging investments in pollution reduction through the removal of technical, institutional, and financial barriers. Expected outcomes of the *Partnership Investment Fund* are increased investments in pollution reduction activities, targeting from US$ 850 million to US$ 1.5 billion in new investments.

111. The Strategic Partnership has another implication, and that is its umbrella function for sub-regional initiatives and programs. The ongoing LME projects in the South China Sea/Gulf of

Thailand and the Yellow Sea are in the process of developing and adopting their respective SAPs, while the GEF pipeline projects in the Sulu-Sulawesi Seas and the Arafura-Timor Seas will be addressing similar issues in the near future.

112. The Strategic Partnership provides a mechanism for GEF, the World Bank, UNDP, UNEP, and the concerned countries to mainstream the broad objectives of the SDS-SEA, and the detailed targets and action programs of any future sub-regional seas SAPs, into their regular programs. The Strategic Partnership will use its comparative advantages to assist the countries in reaching the overarching regional SDS-SEA objectives, by supporting the more detailed, site-specific objectives and targets identified in the SAPs. For the World Bank, this includes utilizing its political convening power, financial leveraging capacity, and global knowledge, to support countries as they take the necessary actions to implement full on-the-ground operations in support of reforms, investments, and management programs needed to implement pollution reduction facilities and services. For GEF, UNDP and UNEP, the Strategic Partnership provides a framework for catalyzing core capacities among countries at the sub-regional and regional levels over a six year period, to promote and implement policies, capacity development programs, financing mechanisms and partnership arrangements among the public and private sectors in support of pollution reduction, habitat restoration, sustainable coastal fisheries, water use/conservation, disaster management, etc. Overall, through the innovative activities undertaken by the Strategic Partnership, the countries will develop a holistic and supportive policy environment for SDS-SEA and SAP implementation.

113. Coordination of the Strategic Partnership will entail the establishment of a joint technical team (i.e., Strategic Partnership Technical Team or SPTT) comprised of representatives of the World Bank's Fund Management Team, UNDP, UNEP and the PEMSEA Resource Facility (PRF). The SPTT will liaise on a regular basis through internet, video conferencing or direct meetings every six months during the project, in order to review the development, implementation and outcomes of their complementary and joint initiatives. The terms of reference for the SPTT will developed and adopted by the members, with due consideration to the following principles:

a. communication and awareness building amongst key partners and stakeholders and the wider community regarding the implementation of the SDS-SEA, SAPs and Fund projects and sub-projects;
b. information and knowledge sharing;
c. evaluation of results achieved and lessons learned;
d. promotion of good practices and useful lessons for replication within the region, as well as outside the region; and
e. partnership building for the purpose of expanding the Strategic Partnership and for promoting the replication of good practices.

114. The procedures for requesting co-financing from GEF under the Partnership Investment Fund project have been established, as identified in the Partnership Investment Fund Brief that was approved by the GEF Council in November 2005. A set of eligibility criteria has also been adopted for the Fund. Seven conditions have been established in order for a project to be eligible for GEF support, including:

a. location within the coastal watersheds of one of the six East Asian LMEs;

b. demonstration of an innovative technical, institutional, or financial mechanism and/or removal of a significant technical, institutional, or financial barrier that reduces cost-effective investments in pollution control;
c. high likelihood of replication and/or scalability within the country and/or more widely in East Asia coastal regions;
d. unlikely to proceed unless grant financing from GEF were allocated to it;
e. necessary co-financing is available;
f. endorsement by the proposing country's GEF focal point; and
g. fulfillment of all relevant World Bank appraisal criteria.

115. Of these seven criteria, the most challenging to the overall success of the Strategic Partnership is the replication and/or scalability potential of the projects. This particular condition requires a common level of understanding between the Partners. The assessment of the replication potential at pre-pipeline entry stage, although primarily the responsibility of the World Bank staff, will benefit from the input of the other Partners regarding the available opportunities for scaling up the technology or practice within the site, the country, or sub region. Discerning conditions to be used in judging the replication potential of a sub-project will be developed and implemented by the SPTT, including, for example: the consequence of the identified constraint or barrier; political, governance, institutional and socio-economic characteristics; required levels of financing; sources of financing; required levels of income/operating revenue; opportunities created for government and non-government partners; and the benefits to be derived by the local communities, especially the poor. This will ensure that replication is not only integrated into each individual sub-project, but is an integral part of the Strategic Partnership and its contribution to scaling up and replication at the national and sub-regional levels. (Details of the Replication Strategy are included in **Annex 7**)

116. The PRF will be tasked with organizing and implementing the communication program for the Strategic Partnership, particularly with regard to: collating the monitoring and evaluation results relating to SDS-SEA, for inclusion in the annual progress reports as well as the triennial State of Coasts report; evaluating, preparing and disseminating good practices, lessons learned, and/or case studies from individual sub-projects under the two projects; and promoting the replication of good practices among countries within the East Asian region and, in collaboration with IW-Learn, to other IW projects in other regions.

Activities for Output G.1:

G.1.1 Operationalize a Strategic Partnership Technical Team (SPTT) to coordinate the development, implementation, evaluation and promotion of the collaborative activities and outputs of the Strategic Partnership. The SPTT will be tasked with:

a. Developing and adopting agreed Terms of Reference;
b. Ensuring effective and efficient coordination between the UNDP regional project and the World Bank investment fund project, with other regional programs and projects;
c. Formulating and implementing a procedure for assessing the replicability and scalability potential of sub-projects under the Strategic Partnership at the local, national, and sub-regional levels;
d. Promoting the replication of good practices and lessons learned from sub-projects through information and knowledge-sharing, partnership building and the expansion of the Strategic Partnership arrangement to include other interested parties, such as donors, financial institutions, other regional programs and projects such as the South China Sea and Yellow Sea LME projects, and the private sector;

e. Monitoring, evaluating and reporting the progress of the various sub-projects on a regular basis and against an agreed set of indicators;
f. Organizing annual workshops and a mid-term, stocktaking workshop involving participating countries and the Strategic Partners, to evaluate progress, impacts and constraints, and to make any refinements/improvements in the Strategic Partnership operations; and
g. Organizing an external review to provide an independent assessment of the progress, outcomes, and benefits derived from the Strategic Partnership arrangement, and to recommend measures to strengthen the arrangement.

G.1.2 Organize and implement a communication/coordination program for the Strategic Partnership including a website, quarterly reviews/newsletters, regional conferences/workshops, etc. to review the progress and achievements of projects and sub-projects, and to promote the replication of good practices across the region and to other regions.

G.1.3 Monitor the progress of the Strategic Partnership through agreed indicators for the Partnership, as well as sub-project specific indicators for each sub-project undertaken by the Strategic Partnership.

G.1.4 Package and disseminate multi-media materials regarding the Strategic Partnership and the related sub-projects to governments and stakeholders, the EAS Partnership Council, the EAS Congress, the Ministerial Forum, and other relevant regional and international forums.

G.1.5 Develop linkages and strategic partnership arrangements with regional and international organizations and institutions, and donors, as well as other regional GEF IW programs, such as the South China Sea, Yellow Sea, Sulu-Sulawesi Seas and the Arafura and Timor Seas, to transfer knowledge, replicate good practices and facilitate increased investments in pollution reduction across the region.

INDICATORS OF SUCCESS: COMPONENT G

- A coordinating mechanism for Strategic Partners agreed to and operating to develop, demonstrated and replicate innovative approaches for engaging the public and private sector in developing, financing, managing and operating affordable water, sewage and sanitation facilities and services;
- Five (5) good practices and case studies prepared and disseminated on demonstration projects, including an assessment of the replication potential, based on agreed indicators;
- Annual workshops and a mid-term stocktaking meeting on the demonstration of innovative policies, practices, technologies and financing and investment mechanisms for pollution reduction, and the progress and achievements in replicating successful demonstrations at the sub-national, national and sub-regional levels;
- A Strategic Partnerships website set up and operating in accordance with GEF IW-LEARN guidelines, transferring information and promoting replication of good practices and lessons learned from the Strategic Partnership;
- Presentation of Strategic Partnership outcomes to GEF-IW Portfolio Conference 2009 (one country representative and the CTO);
- An expanded Strategic Partnership arrangement, encompassing SAPs of sub-regional sea areas of the East Asian region.

COMPONENT H: CORPORATE SOCIAL RESPONSIBILITY FOR SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE RESOURCES

Outcome 8: Multinational and national corporations integrating social responsibility into their organizational strategies, programs and practices, and facilitating the replication and scaling up of capacities in sustainable development of marine and coastal resources among local governments and communities of the region.

117. The PROTECT and DEVELOP strategies of the SDS-SEA call on local and national governments to work in partnership with industry and the private sector to combat coastal and marine degradation from land-based activities, prevent accidental spills and discharges from sea-based activities, clean-up spills and restore damaged resources, promote environmentally sound operations and practices, and increase awareness and capacity related to implementation of pertinent international instruments. Multi-national companies operating in the region are requested to work in partnership with national and local governments, as well as local industry and community groups to build awareness and transfer experience and good practices from other parts of the world, to benefit people and localities with on-the-ground, sustainable solutions to environmental problems.

118. PEMSEA's experience in Bataan and Batangas (Philippines) has demonstrated the comparative advantage of multinational companies (i.e., Shell (Philippines) and Petron Corporation, respectively) as models and champions of corporate social responsibility for national and local industries. In these two cases, the multinationals partnered with the local governments, sharing resources and skills in order to achieve on-the-ground improvements in the protection and restoration of coastal and marine resources.

119. At the same time, the two companies played a special role in the ICM projects by:

a. engaging other industry and private sector entities in sustainable development activities;
b. transferring information, knowledge and technology to enhance the capacities of local communities, governments and industry in overcoming environmental problems;
c. identifying shared objectives for social/economic/environmental development in the areas; and
d. promoting a partnership approach among industry and across sectors to achieve the shared objectives.

120. This component of the project will expand upon the experience of Batangas and Bataan ICM projects to engage the corporate sector in sustainable development of marine and coastal resources as an essential aspect of corporate social responsibility in coastal areas. In addition, The Coca Cola Company (TCCC) has indicated its interest in joining forces with PEMSEA to employ the private sector and the business community in demonstration projects covering strategic issues of sustainable development, in partnership with local governments and communities. Working arrangements will be fostered with TCCC and other interested multinational companies in the pursuit of demonstration projects that will assist coastal communities with sustainable development initiatives, while at the same time providing a learning benefit to the region and to the GEF IW focal area.

Output H.1: Partnership arrangements established and implemented between multinational and national corporations, industry, local governments and communities for sustainable development of marine and coastal resources.

Activities for Output H.1:

H.1.1 Develop multi-media materials and conduct seminars/forums for CEOs and senior managers of corporations (public and private), private industry and local and national government leaders, in order to strengthen awareness and understanding of environmental sustainability, its linkages to economic and social development, and the use of ICM as an effective tool for governance of coastal and marine resources.

H.1.2 Facilitate the development and implementation of partnership arrangements between corporations/industry and local governments and communities and, within the context of ICM scaling up programs, aligning private sector organizational goals for social responsibility with resource commitments and investments in support of social, economic and environmental goals and benefits of the communities.

H.1.3 Link up with a "corporate champion for sustainable development" to develop and implement a demonstration project on corporate social responsibility in strategic issues/areas of concern to local governments (e.g., water use/conservation; disaster management; sustainable livelihoods; improved access to/usage of IT in knowledge sharing and engaging disadvantaged sectors of communities in coastal governance; etc.).

Output H.2: Corporate responsibility practices evaluated and recognized as a special relevance to achieving social, environmental and economic benefits in coastal communities

121. The development of corporate responsibility charters, principles and other instruments by UN and multi-industry bodies (e.g., UN Global Compact; Global Reporting Initiative; OECD Guidelines for Multinational Enterprises; EU Eco-Management and Audit Scheme (EMAS); ISO 9000 and 14000 series of management standards, as well as the forthcoming ISO 26000 standard) and endorsement of these by a large number of companies and firms across the region provides ample evidence that the private sector is engaged in, and is attempting to respond to pressures for, accountable and transparent corporate responsibility practices, both at the international and domestic levels.

122. While these guides and standards provide practical frameworks for quality management and environmental results, they do not specifically pertain to corporate responsibility for sustainable development, nor are they focused on the specific management issues in coastal and marine areas. This component of the project will build on the foundation of existing and planned guides and standards to come up with a systematic process to evaluate, recognize and replicate the contributions and impacts of corporations exercising exemplary social responsibility in their operations within coastal communities.

Activities for Output H.2:

H.2.1 Modify and adopt monitoring and evaluation procedures (e.g., ISO 26000), including social, economic and environmental indicators, as appropriate, to assess corporate policy, commitment and actions in aid of sustainable development of coastal communities and their

natural resources based on PEMSEA's experience in ICM Code and PSHEMS Code and recognition system.

H.2.2 Field-test the monitoring and evaluation procedures in collaboration with existing corporate partners who are working with local government units and stakeholders at ICM sites.

H.2.3 Implement a corporate responsibility recognition system, in collaboration with national governments, private sector, donors, and other concerned stakeholders, to promote and encourage private sector participation, resource commitments and investments in support of social, economic and environmental goals and benefits of coastal communities.

INDICATORS OF SUCCESS: COMPONENT H

- At least 50 corporations, industry and private firms engaged in ICM projects and sustainable development initiatives in coastal communities, as part of ICM scaling up efforts in the region;
- At least one project initiated with a multinational corporate champion, serving as a PPP prototype for addressing sustainable water use/conservation, pollution reduction, coastal fisheries/alternative livelihoods, habitat restoration/protection, and/or disaster management in coastal communities of the region;
- A corporate social responsibility recognition system implemented and promoted as an incentive for increased corporate sector participation in ICM programs.

Project Indicators, Risks and Assumptions

Performance Indicators

123. As described in the M&E Plan, the Logical Framework of the project is generally consistent with the prescribed *Program Performance Indicators for GEF International Waters Program* that covers process, stress reduction, and environmental and social status indicators.

124. The Management Component activities of the project (Figure 3) are focused on providing a functional mechanism for coordinating the implementation of the SDS-SEA over the longer-term. Thus, the major indicators for this component will be *process indicators*, including:

a. countries committing high-level officers to participate in EAS Partnership Council meetings;
b. countries mainstreaming SDS-SEA objectives into national programs; and
c. countries providing in-cash and in-kind support for the operation of the regional mechanism.

125. The State of Coasts reporting system will serve to develop and utilize environmental and social status indicators, by identifying and assessing socio-economic and environmental changes that occur as a consequence of social and economic development and coastal and ocean governance. It will be designed as an instrument for measuring and reporting the environmental status and impact of SDS-SEA implementation. However, societal changes occur over extended periods, certainly longer than the three-year timeframe of this project, with development of awareness, understanding and capacity among sectors and the public. Environmental transformations are an outcome of societal change. Measuring and assessing progress towards desired goals of the SDS-SEA will require indicators that not only focus on the

long-term changes in the environment, but also indicators that reflect the behavioral shifts of society and responses to the root causes of environmental degradation and destruction. As indicators aim to highlight key information over time, it is not possible to provide detailed information on every concern at this stage of the project. However, a scientific and technical team will be tasked with the formulation of the State of Coasts reporting system, preparing a set of indicators that are able to "tell the story" about changes occurring in the coastal and marine environment, as well as particular social and economic issues that impact on or are impacted by, the changing environment. The first State of Coasts report will be published in 2009.

126. The Core Operational Component activities (Figure 3) contain process, stress reduction and environmental and social status indicators. Major *process indicators* in this component include:

a. member governments allocating staff and resources to the development and implementation of national policies and programs in support of SDS-SEA;
b. national interagency, multi-sectoral coordinating mechanisms for SDS-SEA implementation established at the country level, meeting regularly, and facilitating stakeholder participation;
c. national learning networks operating and focusing on strengthening capacities and skills of local governments; and
d. an ICM Code adopted by national and local governments as a standard for measuring and evaluating the effectiveness of coastal management projects and programs.

127. Major *stress reduction indicators* within the Core Operational activities focus on pollution prevention and reduction as a consequence of, for example:

a. increased coastline covered by ICM programs; and
b. investment plans for pollution reduction in two selected pollution hotspot areas adopted and implemented by concerned governments.

128. *Environmental and social status indicators* under this component are found in the ICM scaling up initiatives. Implementation of strategic action plans within ICM framework in targeted coastal areas result in: reductions in nutrient loadings ranging from 10-50%; 5%-10% of habitats identified as protected areas and/or undergoing restoration; improvements in fishery management and stabilization of some coastal fish stocks and alternate increase in biomass.

129. The Supporting Component activities (Figure 3) encompass process, stress reduction and environmental status indicators. *Process indicators* dwell on the increased capacities that countries achieve through 'hands-on' capacity development (e.g., RTF and NTF capacities; AoE programs in place; number of projects implemented by community groups; funding allocations and support for projects involving women, youth, indigenous people, and other marginalized sectors). *Stress reduction indicators* include policy/program reforms in countries, which result in increased investments in pollution reduction; reductions of nutrient and oxygen-demanding loadings to rivers and coastal areas; the increased number of trained professionals and skilled personnel who are working in ICM or other related areas within the framework of the SDS-SEA; and the number of innovative technologies demonstrated to be efficient and cost-effective and slated for replication in other areas/countries. The *environmental and social status indicators* refer to: an increase in the proportion of local population with access to safe water, sewerage, and/or sanitation services; and, in some local areas, improved water quality and reduced incidence of water borne disease.

Risks and Assumptions

130. Possible project risks and risk mitigation measures concerning the development and implementation of the project are summarized in the table below.

Risk	Risk Type	Risk Rating	Risk Mitigation
Lack of government support for the implementation of the SDS-SEA	Political	Low	The SDS-SEA was crafted by the countries after an extensive consultative, participatory process. Countries have ownership of the SDS-SEA. All participating countries signed the Putrajaya Declaration in December 2003 and the Haikou Partnership Agreement in December 2006, indicating their willingness to cooperate to achieve the objectives of the SDS-SEA, nationally and regionally. A number of countries have already taken the initiative to develop work programs aimed at improving national coastal and ocean governance, using the SDS-SEA as a guiding framework.
Lack of government commitment to a legal framework for governing the management of the Seas of East Asia	Political	Medium	Governments of the region have indicated that they are not willing to establish a legal framework at this point in time. Alternatively, a partnership approach has been adopted by the countries as an interim step towards a long-term, self-sustaining regional mechanism. The partnership approach is designed to build confidence and trust among the partners. Governments have signified their commitment to this partnership approach with the establishment of a functional, country-supported PEMSEA Resource Facility (PRF) Secretariat Services. During the project, a review of alternatives to the partnership approach will be conducted, and a Plan of Action for transforming the partnership arrangement into a long-term self-sustaining mechanism will be completed.
Capacity to implement the SDS-SEA varies from country-to-country, and will impede the achievement of the project's outputs and	Operational	Medium	Capacity disparity within and among participating countries is well-recognized, and has been the focus of past and ongoing donor initiatives, including GEF enabling projects at the regional, sub-

Risk	Risk Type	Risk Rating	Risk Mitigation
outcomes.			regional and national levels. The project design, outputs and outcomes have been prepared with due regard to this concern. The project concentrates on putting into place core policies, institutional and legal arrangements, as well as technical, financial and capacity development programs to serve and guide countries in meeting their priorities within their levels of competence. Over the longer term, countries will use and improve upon these core tools and mechanisms as their needs and priorities demand. Not all countries will move toward the objectives of the SDS-SEA at the same pace, but all countries will be making progress.
The available time and resources are too limited to achieve the identified project outputs and outcomes.	Operational	Medium	A critical factor to achieving the project outputs and outcomes within the project timeframe and budgetary allocation is the commitment of the participating governments. Key targets of the project are policy reform, institutional arrangements and innovative financing mechanisms at the national and local levels. The implementation of national ICM scaling up programs is a primary vehicle to deliver the identified outputs. Participating countries are already aware of the modalities of, and benefits to be derived from ICM as a consequence of the PEMSEA regional project. Many countries are responding by committing considerable resources to establishing national ICM programs and support mechanisms. The project provides countries with the means to access and facilitate cooperation and assistance with regional and global partners to achieve their desired individual and collective goals.
Governments are unwilling to implement policy reforms that are necessary in order to facilitate enhanced investment in pollution reduction facilities and services.	Operational	Low	Recognizing that different governments have different policies and priorities, the project will attempt to identify and work with governments at the national and sub-national levels. Some governments have already expressed interest and willingness to implement policy reforms and/or adopt innovative and transparent mechanisms for developing, financing

Risk	Risk Type	Risk Rating	Risk Mitigation
			and managing pollution reduction facilities and services.
Governments and donors are unwilling to collaborate in a Strategic Partnership for pollution reduction arrangement, preferring conventional bilateral approaches.	Operational	Low	The 11th Project Steering Committee of the PEMSEA Regional Programme passed a resolution endorsing the Strategic Partnership approach. It is apparent that participating governments are encouraged by this attempt to build cooperative arrangements among the numerous funding agencies and donors to reduce overlap and duplication of effort. The Strategic Partnership has been designed as a flexible and innovative prototype. The World Bank and UNDP will be the early partners with the countries, implementing innovative and complementary projects and activities aimed at reducing barriers to investments in pollution reduction facilities. As part of the project, a multi-sectoral, multi-disciplinary team comprised of representatives from government, financing institutions, donors, NGOs, and the private sector will coordinate and facilitate the implementation of a replication strategy aimed at increasing and strengthening pollution reduction investments, founded on good practices and innovative approaches demonstrated by the Strategic Partnership. A series of promotional and stock-taking workshops and events will be organized for the purpose of sharing knowledge and benefits derived from the Strategic Partnership, and from the specific projects undertaken by the Strategic Partnership, thereby generating interest and participation from a wider group of donors, governments and private sector interest groups.

Expected global, national and local benefits

131. The outcomes of the project, and the strategic partnership program as a whole, will be realized at different levels in parallel with globally accepted principles. Sustainable development serves as the overarching principle at the global level, while at the national and local levels, the activities are guided by the fundamental principles of integrated and ecosystem-based management, as well as adaptive management, which are broad-based approaches in support of sustainable development. **Annex 4** has been prepared in order to delineate specific linkages

between the outcomes of this project, the relevant sections/actions identified in the WSSD plan of Implementation, and performance indicators that will be incorporated into the M&E program of the project. Thus, the relevance of SDS-SEA implementation can be evaluated on its merit as a contribution to global targets.

132. Locally, through the application of ICM/ecosystem-based management practice (Components C and D), local governments and concerned communities will be better prepared and able to cope with development activities in coastal and watershed areas, to achieve time-bound targets for integrated river basin and coastal area management, nutrient reduction, and sustainable access to safe drinking water and sewage and sanitation facilities, and to implement habitat restoration, fisheries management, and the effective administration of marine protected areas (Components E, F and G). These local ICM/ecosystem-based management activities all have knock-on social, economic and environmental benefits at the national and sub-national levels and across the region. Specifically, they will facilitate the achievement of targets set within the WSSD Plan of Implementation, the MDGs and other multilateral environmental agreements and instruments, such as the GPA, the Convention on Biological Diversity, the Jakarta Mandate, the Ramsar Convention, the Code of Conduct for Responsible Fisheries, the United Nations Framework Convention on Climate Change and others (**Annex 4**). Building the necessary critical mass of communities and human resources will take time; the first three years of the project will set the process and support mechanisms in place.

133. At the national level, the overall benefits of the SDS-SEA implementation project will be two-fold. First, there will be a refocusing of attention on the importance of the coastal area to a country's economy and to society as a whole, and on the benefits derived from integrated, coordinated actions guided by a common policy. This will be aimed at policymakers as well as political figures, enhancing their ownership and understanding of processes and products of the ocean, and taking due consideration of the long-term effects of development policies, projects and programs, both existing and future (Component B). Second, with enhanced recognition of benefits derived from improved ocean and coastal governance, national governments will exert greater effort and resource commitments within the country, regionally and internationally to sustain the implementation of the SDS-SEA.

134. The regional and global outcomes will be far-reaching. As a world center of marine biodiversity, the worsening of the region's environmental integrity has ramifications not only for the inhabitants of East Asia, but also for user States and for other global beneficiaries of the region's marine and coastal resources and waterways. The Seas of East Asia are a political, environmental, biodiversity and socio-economic hotspot – perhaps the foremost hotspot worldwide with regard to sustainable development and management of marine and coastal resources. The success of the SDS-SEA implementation therefore will have a number of significant regional and global ramifications, contributing to a more secure ocean by:

a. reducing threats to national and regional security, brought about by competition over limited resources, which result in transboundary political, social, cultural, economic and environmental risks that could have negative consequences beyond the region;
b. alleviating the pressures of poverty in the region, which compound the threats to security, through conservation and improved management of coastal resources at the community level, while contributing to the global targets of the WSSD POI and the UN MDGs especially poverty alleviation, and accessibility to water, sewerage and sanitary services;
c. achieving important milestones in the sustainable development of marine and coastal resources, thereby leveraging the replication of ICM programs within the region and

beyond, and providing guidance to solving a broad range of relevant problems, such as in-country migration to coastal areas, population growth, pollution reduction, waste management, habitat restoration and conservation, overexploitation of fisheries, social unrest, unemployment, terrorism, uncontrolled development, and conflicting uses of limited available resources;

d. increasing government commitments to reducing nutrients and oxygen-demanding pollutants in rivers and marine and coastal areas, through the promotion and replication of innovative policies, technologies, financing mechanisms, economic instruments and public-private partnership arrangements, as demonstrated by the GEF Strategic Partnership; and
e. changing the attitude and behavior of leaders, decision makers and senior managers in the public and private sectors, by transferring a portfolio of successful projects, case studies and lessons learned, involving national and local governments, the corporate sector/business community, IFIs, international agencies and organizations, donors, scientific institutions/universities, NGOs and community groups in managing marine and coastal areas and resources in a sustainable manner.

135. The project's impacts correlate well with the indicators of on-the-ground reforms and stress reduction measures, which are the focus of the IW Focal Area during GEF4, including:

Relevant IW Indicators	Project's Contribution to the IW Indicator
Multi-country water body legal framework developed and/or strengthened.	PEMSEA's EAS Partnership Council transformation into a long-term, self-sustaining regional mechanism for SDS-SEA implementation with its own legal personality; 6-year Framework of Partnership Programmes for SDS-SEA implementation adopted and initiated by participating countries and other partners; Plan of Action for the transformation of PEMSEA into a sustainable regional mechanism with its own legal identity adopted and initiated.
National policies, legal and institutional reforms adopted to reduce land-based sources of nitrogen, phosphorus and oxygen-demanding pollutants, consistent with agreed transboundary action programs.	ICM policies and legislation catalyzed in at least 5 countries during the project (Cambodia, China, Indonesia, Philippines, Vietnam) covering scaling up of ICM programs, 6-year framework programs with time-bound targets for pollution reduction, and national interagency, multisectoral coordinating mechanisms.
Financial and institutional sustainability of joint transboundary waters institutions.	PEMSEA Resource Facility Secretariat Services, PEMSEA Network of Local Governments Secretariat, and Twinning Secretariat for Ecosystem-based management fully functional and sustained by participating governments and their partners.
Broad stakeholder involvement in transboundary water body priority setting and evaluation of progress established.	Regular triennial EAS Congress and Ministers Forum conducted, serving as the vehicle for knowledge sharing and evaluation of local, national and regional progress towards the agreed objectives and targets of the SDS-SEA, and employing the regional State of Coasts reporting system as the primary source of information.
Financial mechanisms in place to support SAP implementation.	Project Preparation Revolving Fund(s) operating in at least one country and providing fully developed project proposals to financing programs and investment groups in the public and private sectors, for financing of pollution reduction projects in the municipal, industrial and agricultural sectors.
Reductions in conflicting uses and degradation/ destruction of marine and coastal resources.	ICM programs functioning in coastal provinces, cities and municipalities in Cambodia, China, Philippines, Indonesia, Japan, RO Korea, Thailand, Timor Leste, and Vietnam, addressing use conflicts and priority environmental issues, including pollution reduction, waste management, conservation/restoration of habitats and fisheries, sustainable use of water resources, alternative livelihoods, coastal development, and disaster management.
Adoption and sustainable implementation of policy, legal and institutional reforms for	Policy and institutional reforms adopted among local governments implementing ICM programs, catalyzing investment opportunities for

Relevant IW Indicators	Project's Contribution to the IW Indicator
pollution reduction and coastal protection.	the corporate sector/business community and IFIs in Philippines and Vietnam.
Reduced discharges of nutrients and oxygen-demanding pollutants from the municipal, industrial and agricultural sectors.	Replication strategies/investment plans prepared for priority pollution hotspot locations in China (Bohai Sea) and the Philippines (Manila Bay); innovative technologies, practices and financing approaches demonstrated under the Partnership Investment Fund sub-projects promoted/replicated in pollution hotspots; reductions in nutrient loadings ranging from 10-50% in targeted coastal areas.
Increased proportion of the local population with access to safe and sustainable water supply, sewerage and sanitation facilities.	ICM scaling up programs result in improvements in the quality of life in local communities, as measured by reductions in risk to human health from unsafe drinking water sources and untreated sewage discharges, and sustaining/increasing community livelihoods, especially coastal fisheries and aquaculture.
Improved water quality of coastal areas at ICM sites, increased areas of protected and/or restored habitat, stabilized or increased fish biomass; other indicators of ecosystem health.	Implementation of strategic action plans within ICM framework in targeted coastal areas result in: 5%-10% of habitats identified as protected areas and/or undergoing restoration; improvements in fishery management and stabilization of some coastal fish stocks and alternate increase in biomass.

Country Ownership: Country Eligibility and Country Drivenness

136. The participating countries, including Cambodia, China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam, are eligible for GEF assistance under para 9(b) of the GEF Instrument. Brunei Darussalam, Japan, RO Korea and Singapore will be participating in the project on a cost-sharing basis, thereby providing an opportunity for cross-country transfer of knowledge and experience between developed countries and lesser developed countries of the region.

137. The proposed project is targeted at assisting countries to strengthen coordination, build capacity, and leverage investments to achieve their commitments under the *Putrajaya Declaration,* and the action programs of the Sustainable Development Strategy for the Seas of East Asia. Country commitments to and the sense of ownership of the project have been demonstrated in a series of recent initiatives undertaken by the concerted efforts of the participating countries:

a. formulation and adoption of the *Haikou Partnership Agreement and Partnership Operating Arrangements* for the implementation of the SDS-SEA, signed by Ministers of participating governments during the Ministerial Forum of the EAS Congress 2006;
b. financial commitments to the establishment and operation of the PRF Secretariat Services, including in particular, cash contributions by China, Japan and RO Korea, through Cost Sharing Agreements (CSA) with the UNDP; and
c. national consultation workshops and/forums undertaken from January 2006 to August 2006 in Cambodia, China, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Thailand and Vietnam, with a total of over 900 participants, including national and local government officials and representatives of research and education institutions, NGOs, corporate and private sector and communities. The President of the Republic of Philippines addressed her country's National Forum on Sustainable Development of Coastal and Marine Resources, announcing her signature of an Executive Order for the adoption and implementation of integrated coastal management (ICM) as a national strategy. These events have been able to take stock of experience and lessons learned in the past project implementation and

identify national needs and priorities that have been reflected in the formulation of this Project Document.

138. The project will also complement the activities of the countries, UNDP, UNEP-GPA, the World Bank, the Asian Development Bank, and bilateral projects aimed at similar objectives. The project also fits programmatically with existing and proposed GEF projects in the region including, for example: Management of Livestock Wastes in East Asia; Implementation of Public-Private Partnerships in Environmental Investments; the Mekong River Wetland Biodiversity Conservation and Sustainable Use Program; Biodiversity Management in the Coastal Area of China's South Sea; Hai River Basin Integrated Water Resources Management; Guangdong - Pearl River Delta Urban Environment; the Marine Electronic Highway Demonstration Project (Straits of Malacca); and Conserving Marine Biodiversity through Enhanced Marine Park Management and Inclusive Sustainable Island Development (Malaysia). The EAS Partnership Council, as well as the triennial EAS Congress, will serve as vehicles for sharing of information and strengthening partnerships and collaborative arrangements among these related initiatives and SDS-SEA implementation.

Project Sustainability

139. Sustainability refers to the continuation of benefits – institutional, environmental, social, economic and financial – beyond the project. The project targets *institutional sustainability* with the long term implementation of the SDS-SEA strategies and action programs, including:

a. Strengthening the capacity of the new regional mechanism (i.e., EAS Partnership Council; PEMSEA Resource Facility; and EAS Congress/Ministerial Forum) for coordinating the implementation of the SDS-SEA, and putting in place a systematic monitoring and reporting system (i.e., State of Coasts) to assess the state of the coasts, and to refine and adapt the SDS-SEA implementation program in response to the assessments (Component A);
b. adoption and implementation of national policies, legislation, action plans and coordinating mechanisms for sustainable coastal and ocean development and management through ICM (Component B); and
c. formulation and implementation of a Plan of Action that will transform PEMSEA into a competent, self-sustaining, country- and partner-owned regional implementing mechanism for SDS-SEA.

140. The *environmental sustainability* of the project is covered through:

a. development and implementation of national coastal and ocean policy, which encourages sustainable development of coasts and oceans, including investments in pollution reduction;
b. capacity building of local and national staff on coastal governance, and ICM/ecosystem-based management implementation and replication;
c. adoption and implementation of ICM programs at the local government level, with a target of 5% of the coastlines of the region initiating or fully implementing ICM programs by the completion of the project (Component C); and
d. putting in place a GEF/World Bank/UNDP/PEMSEA Strategic Partnership to facilitate the development, demonstration and replication of good policies, practices, technologies and financing mechanisms for pollution reduction.

141. The project addresses *social sustainability* by:

a. conducting high-level national and regional ocean forums to promote and mainstream policies and programs on sustainable coastal and ocean management into the national and local socioeconomic development agenda, including the carrying out of national assessments of contributions made by the coastal and marine areas/sectors to overall social and economic development at the country level and the benefits derived for present and future generations;
b. scaling up on-the-ground integrated management of coastal and watershed areas at the local government/community levels across the region, thereby enhancing food, shelter, livelihood/employment, health, environmental and economic security of local populations on a sustainable and self-reliant basis; and
c. providing the means and opportunities for women, the youth, the poor and other marginalized groups to develop and implement initiatives aimed at conserving and restoring coastal and marine resources, while enhancing social well-being and livelihoods in coastal communities, in collaboration with the GEF/UNDP Small Grants Programme, and other relevant programs.

142. The project addresses *financial sustainability* in the following ways:

a. countries are challenged with supporting the operation of the PRF Secretariat Services, commencing in January 2007. The commitment by three countries (i.e., China, RO Korea, and Japan) bodes well for the financial sustainability of the regional mechanism;
b. development and adoption of rolling 6-year national program frameworks, including the identification of priority issues/areas of concern, milestone targets and agreed timeframes, and the delineation of supporting national programs and related resource commitments;
c. establishment of a regional Partnership Fund, as part of the financing arrangements for the regional implementing mechanism, to channel and ensure best use of voluntary contributions of resources from countries, international agencies, donors, institutions and other groups supporting the SDS-SEA implementation program; and
d. promotion and facilitation of policy and other institutional reforms at the national and local government levels, to improve the investment climate and economic instruments in order to encourage public and private sector investments in pollution reduction facilities and services; and
e. joint development and demonstration of the Project Preparation Revolving Fund for pollution reduction, in collaboration with GEF and World Bank.

Project Replicability

143. Replicability is an integral element of the SDS-SEA implementation. Nevertheless, it is recognized that the East Asian region presents a substantial challenge to the achievement of the desired levels of replication. The capacity disparities that exist within and among countries, and the lack of effective working relationships among the many donors, international institutions and regional programmes and projects that are operating in the region, have resulted in limited replication between and across such initiatives in the past.

144. To address these constraints, the project will put into operation an innovative regional arrangement, founded on intergovernmental and multi-sectoral partnerships. As a partnership, the regional arrangement will be outcome-oriented, meaning that the partnerships are formed to achieve specific objectives under the umbrella of the SDS-SEA. When the respective objectives

of the Partners have been achieved, individually and/or collectively, the partnership ceases, transforms to a new institutional arrangement, or adopts a new target.

145. Such an arrangement is designed to facilitate cooperation and collaboration among outcome-oriented Partners, through such measures as information- and knowledge-sharing, capacity development, demonstration of innovative approaches and technologies, and scaling up and replication of good practices. Several novel mechanisms will be applied during the project in order to facilitate and expand Partner support for SDS-SEA implementation, including the EAS Partnership Council, the triennial EAS Congress, the Ministerial Forum, the PEMSEA Network of Local Governments (PNLG), the regional Partnership Fund, and national and regional training programs and forums organized by PEMSEA or in cooperation with organizations, such as the World Bank, UNDP, UNEP, regional institutions, programs and projects such as the South China Sea and Yellow Sea LME projects, and international NGOs.

146. In addition, the PEMSEA Resource Facility (PRF) will be set up with the financial support of participating countries. The PRF is a package of services and resources mobilized by PEMSEA to facilitate the implementation of the SDS-SEA. The PRF consists of Secretariat Services in support of the EAS Partnership Council, and Technical Services to provide services required by Partners and collaborators. The Technical Services will be operationalized through the implementation of projects and services funded by donors and other collaborators. The PRF will be the primary vehicle of PEMSEA for packaging, disseminating and promoting the replication of good practices and lessons learned from the various projects undertaken by Partners (i.e., members of the EAS Partnership Council), as well as donors and collaborators funding projects in the region.

147. The Strategic Partnership component of the project, comprised of GEF, World Bank, UNDP and PEMSEA, will have full access to the regional mechanism and its support services to promote and facilitate replication and scaling up of proven, innovative technologies and approaches to pollution reduction. The replication strategy of the Strategic Partnership consists of two major elements, namely: a) replication or scaling up of good practices within the immediate area of the Partnership Investment Fund demonstration project in order to achieve the full benefit of the forecast reduction in pollution loadings; and b) replication of good practices at the national and regional levels, where opportunities for application of demonstrated technologies and practices have been identified and can be facilitated.

148. The strategy aims to promote the replication of each demonstrated technology or practice under the Partnership Investment Fund project, through information and knowledge sharing activities, national workshops, and regional conferences. Specific actions include:

a. an annual replication workshop conducted in coincidence with meetings of the EAS Partnership Council and/or the PEMSEA Network of Local Government;
b. participation of at least one country official to attend the GEF International Waters Portfolio Conference in 2009 as well as funding for an exhibit at the conference;
c. GEF websites set up for the Strategic Partnership and for each demonstration project; and
d. a series of opportunity briefs published and disseminated on the good practices and replication opportunities. Project websites will be consistent with the IW LEARN guidelines and linked to IW LEARN networks.

149. The overall, systematic approach to replication is detailed in **Annex 7.**

MANAGEMENT ARRANGEMENTS

Organizational Arrangements

150. The project will be implemented in accordance with the organization chart for project management, included in **Annex 5.** The EAS Partnership Council will serve as the Project Steering Committee. The EAS Partnership Council and the EAS Congress will provide the project with access to a wide audience of concerned stakeholders, monitoring overall progress, facilitating coordination across programs and projects, strengthening transfer of knowledge and good practices and avoiding duplication of effort. The project will be implemented by the UNDP, through the PEMSEA Resource Facility, with guidance from and in coordination with the EAS Partnership Council and the EAS Congress.

151. The PEMSEA Resource Facility will serve the pivotal project management function, providing technical and management services that include:

a. implementing the EAS Partnership Council's decisions concerning policy and operating modalities for the GEF project;
b. developing, coordinating and implementing the GEF project in collaboration with participating countries, partners and collaborators;
c. preparing and submitting annual consolidated reports to Council on the GEF project development and implementation, including financial statements;
d. providing technical, financial, investment and management support for specific projects and programs within the framework of the SDS-SEA;
e. developing and implementing a process of recognizing and certifying good practices in SDS-SEA implementation;
f. monitoring and reporting on the implementation of the SDS-SEA to the EAS Partnership Council and the EAS Congress; and
g. coordinating the development of a long-term, self-sustaining regional arrangement with its own legal identity, taking into account changing conditions, emerging issues and other related factors.

Institutional Arrangements

152. Institutional linkages have been manifested through consultation with various international agencies and institutions, as follows:

a. The project complements the work of UNDP in the region, providing UNDP country offices with a mechanism and road map to sustainable development and the achievement of the WSSD and MDG targets through implementation of the SDS-SEA;
b. An agreement has been signed with the UNDP Small Grants Programme in support of NGOs/CBOs/POs participation in the formulation and implementation of coastal strategies at the local government level;
c. The World Bank, UNDP and PEMSEA are in the process of forging a pilot Strategic Partnership Arrangement for implementation of the SDS-SEA. The arrangement includes development and implementation of a WB/GEF Partnership Investment Fund for Pollution Reduction in the LMEs of East Asia. World Bank is currently implementing integrated river basin management projects in the Hai, Pearl and Mekong Rivers, which are an integral part of the SDS-SEA strategy;

d. IMO has implemented a number of capacity building initiatives in the East Asian Seas region through the Regional Programme Office (RPO) of PEMSEA. This is expected to be continued under the proposed project, particularly with regard to strengthening awareness and capacities in maritime safety, marine pollution prevention from ships, ship and port security, invasive alien species in ballast water, anti-fouling systems, and the designation and management of particularly sensitive sea areas (PSSAs). A letter of agreement is pending;
e. An MOA/LOI has been signed with UNEP-GPA, outlining areas of cooperation and collaboration regarding implementation of GPA within the framework of the SDS-SEA in the East Asian region;
f. UNEP GPA and UNEP/COBSEA have been part of the consultation process in the development of the SDS-SEA. PEMSEA and COBSEA have also prepared a joint policy brief entitled *Partnership Opportunities for Enhancing GPA Implementation in the East Asian Region (2007-2011)*, which was presented to the GPA IGR2 meeting in October 2006. The policy brief outlines ways and means of promoting enhanced collaboration and sharing experiences and knowledge among countries and regional programs and projects. UNEP GPA is a member of the EAS Partnership Council, while COBSEA sits as an Observer at the Council;
g. Consultations have been undertaken with the two GEF regional projects (i.e., GEF/UNEP South China Sea LME project; and GEF/UNDP Yellow Sea LME project) to build awareness and understanding on the implementation of the SDS-SEA, and its relevance to the respective SAPs of the two sub-regional projects. Both projects were invited to join the EAS Partnership Council, as a forum for increased collaboration and knowledge sharing among countries of the region and their partners, all of whom are involved in sustainable development of the seas of East Asia. The GEF/UNDP Yellow Sea project signed the Partnership Operating Arrangements of PEMSEA in December 2006, thereby becoming a member of the EAS Partnership Council. The GEF/UNEP South China Sea project collaborated with PEMSEA in the organization and implementation of the EAS Congress 2006 (One Ocean, One People, One Vision) and sat as an Observer during Ministerial Forum the Inaugural Meeting of the EAS Partnership Council;
h. Conservation International signed a Letter of Cooperation with PEMSEA along with the Partnership Operating Arrangements in December 2006, indicating areas of collaboration in East Asia with regard to resource and biodiversity conservation and protection in the Sulu-Sulawesi Seas. The arrangement covers collaboration related to development of national coastal and marine policy, good practices in climate change adaptation strategies within the ICM framework, contribution to the regional State of Coasts report, and training on specialized skills for application of ICM/ecosystem-based management and integrated implementation of international environmental instruments and regional plans of action. A similar agreement with IUCN is pending;
i. A Letter of Cooperation was with the Department of Sustainability and Environment (DSE) and the Victorian Coastal Council (VCC) of Victoria, Australia, in December 2006 on the following activities: awareness-building; skills enhancement and professional development; linkage-, partnership, and local alliance—building; and strengthening the use of intellectual capital through networking for marine education, training and research;
j. NOAA signed a Letter of Cooperation with PEMSEA in December 2006 covering the integrated freshwater to oceans management approach, focused on the Jiulongjiang River in the Xiamen-Zhangzhou-Longyan region of Fujian Province;

k. Three Korean research institutions, namely Korea Maritime Institute, Korea Ocean Research and Development Institute, and Korea Environment Institute, signed MOUs in May 2006, to broaden knowledge sharing and capacity building in integrated coastal management in the East Asian Seas region. The MOUs provide a formal framework for organization of joint training and technical workshops, knowledge sharing, development of research initiatives, and staff exchange. The three institutions signed the Partnership Operating Arrangements at the EAS Congress 2006; and
l. The GEF IW Learn project is a key player in the implementation of the project. Training and knowledge sharing systems of IW Learn are particularly supportive for transferring PEMSEA experience in ICM to other GEF projects in other regions, such as the Bay of Bengal, the Pacific SIDS projects, as well as collaborative efforts with the GEF Red Sea.

153. The project will continue to facilitate and strengthen collaborative arrangements with other partners and projects at all levels of implementation. Annexes provide more detail on this institutional framework, including a project-wide organizational chart (**Annex 5**) and Terms of Reference for PRF personnel (**Annex 9**). **Annex 11** provides partners' letters of commitment and documentation of co-financing.

MONITORING AND EVALUATION PLAN AND CORRESPONDING BUDGET

Monitoring and Evaluation

154. Monitoring and evaluation (M&E) of the proposed project will be conducted in accordance with established UNDP and GEF procedures, and in consonance with the management structure and processes adopted under the proposed project. The Logical Framework (**Annex 3**), which covers performance indicators for project implementation along with their corresponding means of verification, will underpin the M&E system for the proposed project.

155. Under activities A.1.5, C.1.3, and G.1.3, the Project will support the development of a fuller and more detailed set of indicators than is possible to include in the Logical Framework, applying the structure of GEF IW indicators, based on process, stress reduction and environmental and social status indicators.

156. The standard M&E reports and procedures required for all UNDP/GEF projects will apply to the M&E for the proposed project, including the following:

- *Inception Workshop and Report*. The *Inception Workshop* among the parties involved in the project, and resulting *Inception Report* are the venue and means to finalize preparations for the implementation of the proposed project, involving the formulation of the first annual work plan, detailing of stakeholder roles and responsibilities, and of reporting and monitoring requirements. It is noteworthy, however, that the preparation of the Project Document of the proposed project already adopted a rather long and rigorous consultative process under the ongoing Regional Programme PEMSEA. It is therefore anticipated that the inception workshop and the resulting report ensuing during the incipient months of the succeeding project's implementation would result in minor adjustments to the provisions in the original Project Document.

- *Tripartite Review (TPR*). Project monitoring will occur under a *tripartite review*, in the form of the Intergovernmental Session of the EAS Partnership Council, the highest policy-level meeting of the parties directly involved in the implementation of the project. It is an important and formal event in the monitoring process conducted at least every year following the Inception Workshop. It will assess the progress of the project and take decisions on recommendations to improve the design and implementation of the project in order to achieve the expected results. The same parties involved in the prior Inception Workshop will participate in the TPR.

- *Quarterly Operational Report***.** Each quarter, the PEMSEA Resource Facility will prepare a 100-word summary of the project's substantive and technical progress towards achieving its objectives. The summaries will be reviewed and cleared by UNDP-Manila before being sent to the UNDP/GEF Regional Coordinator;

- *Harmonized Annual Project Report and Project Implementation Review, including Project Terminal Report.* These annual requirements by UNDP and GEF, respectively, will cover performance assessment on project outputs and outcomes, constraints experienced, lessons learned and recommendations, for input to the TPR meetings. A Terminal version will be prepared for the Terminal TPR meeting;

- *Independent External Evaluation.* This will consist of Mid-term Evaluation undertaken during the second implementation year, determining progress achievements, issues and recommendations that input to the final half of project term, and Final Evaluation conducted three months prior to the final TPR meeting, covering impact, sustainability, and follow-through recommendations;

- *Budget Revisions***.** Project budget revisions will be signed by the Designated Institution and UNDP Resident Representative. An annual revision is mandatory and will be completed by 10 June. This will reflect the final expenditures for the preceding year, to enable the preparation of a realistic plan for the provision of inputs for the current year. Other budget revisions may be undertaken as necessary during the course of the project. It is expected that significant revisions will be cleared with the UNDP/GEF Regional Coordinator for consistency with the GEF principle of incrementality and GEF eligibility criteria before being approved;

- *Substantive Project Revisions***.** Substantive revisions are defined as set out in the UNDP Programming Manual and allow for substantive changes in the project's objectives, immediate objectives, duration, scope of intervention, or project sites. Such revisions will be undertaken in accordance with the UNDP Programming Manual and will be endorsed by the TPR. In addition, if the substantive project revision includes changes to the agreed use of GEF funds, it will be cleared by the Executive Coordinator UNDP/GEF before being signed;

- *Audit.* The project will be subject to the audit procedures and requirements of the IA (UNDP).

157. M&E procedures intrinsic to the adopted structures and processes of the proposed project, particularly those cited in the *Partnership Operating Arrangements for the*

Implementation of the SDS-SEA accepted during the 12th PSC Meeting, will also apply. This involves the *Secretariat Services Unit* of the *PEMSEA Resource Facility* that will:

- prepare and submit to the EAS Partnership Council a consolidated report of the programme development and implementation, including financial statements;
- monitor and report on the implementation of the SDS-SEA; and
- coordinate the updating of the SDS-SEA, taking into account changing conditions, emerging issues and other related factors, on a periodic basis.

158. The overall monitoring and evaluation plan is summarized in **Table 1**.

Corresponding Budget

159. The corresponding budget for the M&E plan is $622,858, excluding PRF Technical Services staff time and UNDP staff time and travel. The breakdown of M&E budgetary allocations is included in **Table 1**.

160. **Table 2** summarizes process and stress reduction indicators, as provided in the Logical Framework (**Annex 3**) for the region and for participating countries, as appropriate. These indicators will be utilized to monitor progress and achievements of project implementation, and will be reported on an annual basis. In addition, the table contains indicators of catalytic impact, which focus on leveraging investments in pollution reduction, in line with the World Bank Partnership Investment Fund, as part of the Strategic Partnership arrangement (Component G).

Table 1: Indicative Monitoring and Evaluation Plan and Corresponding Budget

Type of M&E Activity	Responsible Parties	Budget US$ *Excluding Project Team Staff Time*	Timeframe
Inception Report	➢ PRF Technical Services	Nil	Immediately following the first Project Steering Committee/EAS Partnership Council
Development of fuller and more detailed set of indicators	➢ PRF Technical Services ➢ Regional Task Force on State of Coasts reporting (A.1.5) ➢ National Task Forces on ICM reporting (C.1.3) ➢ Strategic Partnership project indicators (G.1.3)	125,000	Within 12 months of project start-up
Measurement of project progress and performance	➢ Local, national, sub-regional and regional reporting system for the State of Coasts report ➢ PRF Technical Services	395,000	State of Coast report will be published triennially Progress indicators/ performance indicators will be monitored annually and reported in APR/PIR, including catalytic impact.
TPR and TPR Report	➢ EAS Partnership Council - Intergovernmental Session ➢ PRF Technical Services ➢ UNDP GEF	Nil	Annually
Quarterly Operational Reports	➢ PRF Technical Services ➢ UNDP PPRR ➢ UNDP GEF	Nil	Quarterly
APR/PIR	➢ PRF Technical Services ➢ UNDP PPRR ➢ UNDP GEF	Nil	Annually
Project Steering Committee meetings	➢ EAS Partnership Council – Technical Session ➢ PRF Technical Services ➢ World Bank (Strategic Partnership) ➢ UNDP PPRR	Nil	Annually

Type of M&E Activity	Responsible Parties	Budget US$ *Excluding Project Team Staff Time*	Timeframe
Mid-term External Evaluation/Report	➢ PRF Technical Services ➢ UNDP PPRR ➢ UNDP GEF ➢ World Bank (Strategic Partnership) ➢ External consultants	30,000	At the mid-point of the project
Final Terminal Evaluation/Report	➢ PRF Technical Services ➢ UNDP PPRR ➢ UNDP GEF ➢ World Bank (Strategic Partnership) ➢ External Consultants	42,858	At the end of project implementation
Budget Revisions	➢ PRF Technical Services ➢ UNDP GEF	Nil	Annually, but before June 10
Substantive Budget Revisions	➢ PRF Technical Services ➢ UNDP GEF Executive Coordinator	Nil	As needed
Financial Audit	➢ PRF Secretariat Services ➢ UNDP PPRR	30,000	As required by the IA/EA
TOTAL INDICATIVE COST *Excluding project team staff and UNDP staff and travel expenses*		**622,858**	

Table 2: Indicative Process (P), Stress Reduction (SR) and Catalytic Indicators (CI) Subject to Annual Monitoring and Reporting

Project Component	Indicators	Means of Verification	Sampling Frequency	Location
Component A: A functional regional mechanism	(P) 6-year framework of partnership programs adopted by the EAS Partnership Council	TPR report APR/PIR	Annual	Region
	(P) Partnership Fund adopted/implemented by the EAS Partnership Council	TPR report APR/PIR	Annual	Region
	(P) Local, national and regional State of Coasts reporting system developed and demonstrated	TPR report APR/PIR	Annual	Cambodia, China, Philippines, Thailand, Vietnam, Japan, Singapore, RO Korea
	(P) Plan of Action for a long term, self-sustained regional mechanism adopted by EAS Partnership Council	TPR report APR/PIR	Annual	Region
Component B: National policies and reforms	(P) National reforms/policies for integrated management of coastal and marine areas adopted/initiated	APR/PIR	Annual	China, Philippines, RO Korea, Thailand, Vietnam
	(P) 6-year national framework plans adopted, with relevant agencies allocating resources and assigning managers and staff to implement work programs	APR/PIR	Annual	RO Korea, Vietnam
Component C: National ICM scaling up programs	(P) ICM policies/ legislation and 6-year action plans for ICM implementation adopted and/or initiated	APR/PIR	Annual	Cambodia, China, Indonesia, Philippines, Vietnam
	(P) National interagency, multisectoral coordinating committees for ICM program established providing planning, direction-setting, decision-making and evaluation for program	APR/PIR	Annual	China, Philippines
	(SR) 5% of the region's coastline confirmed to be developing and implementing ICM programs	APR/PIR	Annual	Cambodia, China, Indonesia, Japan, Philippines, RO Korea, Thailand, Timor Leste, Vietnam
	(P) PEMSEA ICM Code developed and adopted by the EAS Partnership Council as a standard for voluntary use by national and local governments in ICM program development and implementation.	APR/PIR	Annual	Region
Component D:	(P) Integrated river basin and	APR/PIR	Annual	China, Philippines, RO

Project Component	Indicators	Means of Verification	Sampling Frequency	Location
Twinning arrangements for river basin and coastal area management	coastal area management programs established and operating in identified pollution hotspots			Korea, Indonesia
	(P) South-south or north-south twinning arrangements negotiated, signed and implemented in support of river basin and coastal area management programs in identified pollution hotspots.	APR/PIR	Annual	China, Philippines
Component E: Intellectual Capital and Human Resources	(P)Two (2) Areas of Excellence operating within existing research institutions and institutions of higher learning, focusing on: monitoring changes in the marine environment; habitat restoration and rehabilitation; and ocean policy and international conventions.	APR/PIR	Annual	Philippines, Hong Kong
	(P) National ICM training program developed and implemented	APR/PIR	Annual	China, Philippines, Indonesia, Vietnam,
	(P) Agreement signed/ implemented with GEF IW:LEARN, regarding regional and global dissemination of regional lessons and case studies	APR/PIR	Annual	Region
	(SR) At least 6 site-specific and community level collaborative projects developed and implemented to strengthen community participation in decision-making through SGP support	APR/PIR	Annual	Cambodia, Indonesia, Thailand, Philippines, Vietnam
	(SR) 100% increase in the number of local governments participating in PNLG and committed to implementing ICM programs	APR/PIR PNLG Proceedings	Annual	Region
	(P) World Oceans Week hosted by the Xiamen Municipal Government on a regular basis.	APR/PIR PNLG Proceedings	Annual	China

Project Component	Indicators	Means of Verification	Sampling Frequency	Location
Component F: Investment and Financing	(P) Good policies and practices in financing and investment in pollution reduction facilities and services packaged and promoted for adoption among ICM sites and pollution hotspots	APR/PIR	Annual	China, Philippines, Vietnam
	(P) Financing and investment policy reforms developed, adopted and implemented at ICM sites	APR/PIR	Annual	China, Philippines, Vietnam
	(P) One-stop public-private partnership support service for local governments and the private sector established and operating within the PRF.	APR/PIR	Annual	Philippines
Component G: Strategic Partnership Arrangements	(P) Five (5) good practices and case studies prepared and disseminated	Technical reports	Annual	China, Indonesia, Philippines, Vietnam
	(P) Annual workshops and midterm stocktaking meetings at the national and regional levels promoting replication of good practices	APR/PIR	Annual	China, Indonesia, Philippines, Vietnam, EAS Congress 2009
	(CI) Increased investment of $350 to $500 million in pollution reduction	APR/PIR World Bank disbursement data	Annual	China, Indonesia, Philippines, Vietnam
Component H: Corporate Social Responsibility	(P) Agreements forged between 50 companies and firms and local government units in support of ICM or environmental program development and implementation	APR/PIR	Annual	Philippines, Indonesia
	(SR) Demonstration project involving multinational corporation and local government/community re: sustainable development	APR/PIR	Annual	Region
	(P) Recognition and incentive system developed in support of corporate social responsibility for sustainable development of coastal communities	APR/PIR	Annual	Region

LEGAL CONTEXT

161. This Project Document shall be the instrument referred to as such in Article 1 of the Basic Assistance Agreement between the United Nations Development Program and those participating institutions which signed such agreement.

162. The following types of revisions may be made to this Project Document with the signature of the Principal Project Representative (PPR) only, provided he or she is assured that the other signatories of the Project Document have no objection to the changes:

a. Revisions in, or addition of, any of the annexes of the Project Document.
b. Revisions that do not involve significant changes in the immediate Subcomponents, objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation.
c. Mandatory annual revisions that re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility.

TOTAL BUDGET AND WORK PLAN

Project Summary by Atlas Code

Award ID:	
Award Title:	**PIMS: County Name Project Title:**
Business Unit:	
Project Title:	**PIMS: County Name Project Title:**
Implementing Partner	

GEF OUTCOME/ATLAS ACTIVITY	Res. Party - Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	Atlas Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
Component A: A functional regional mechanism for SDS-SEA implementation	PRF		GEF	71200	International Consultants	28,890	21,400	21,400	71,690	1
				71300	Local Consultants	95,337	93,090	73,616	262,043	
				71600	Travel	42,800	64,200	32,100	139,100	
				72100	Contract Services - Company	118,235	120,375	125,190	363,800	
				63400	Learning Costs	79,715	155,150	246,100	480,965	
				74200	AV & Publications	37,985	40,767	65,912	144,664	
	SUBTOTAL					**402,962**	**494,982**	**564,318**	**1,462,262**	
	PRF		GOV'T	71200	International Consultants	186,395	186,395	186,397	**559,187**	
				71300	Local Consultants	61,907	61,907	61,909	**185,723**	
				71400	Contract Services - Individual	51,696	51,697	51,697	**155,090**	
	SUBTOTAL					**299,998**	**299,999**	**300,003**	**900,000**	
Component B: National policies and reforms for sustainable coastal and ocean governance	PRF		GEF	71200	International Consultants	64,200	90,950	69,550	224,700	2
				71300	Local Consultants	17,120	21,400	8,560	47,080	
				71600	Travel	5,885	6,955	24,075	36,915	
				72100	Contract Services - Company	64,200	96,300	42,800	203,300	
				63400	Learning Costs	42,800	42,800	21,400	107,000	
				74200	AV & Publications	0	2,140	2,675	4,815	
	SUBTOTAL					**194,205**	**260,545**	**169,060**	**623,810**	

GEF OUTCOME/ATLAS ACTIVITY	Res. Party - Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	Atlas Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
Component C: National ICM Scaling-up Programs	PRF		GEF	71200	International Consultants	177,085	235,400	155,150	567,635	3
				71300	Local Consultants	44,940	74,900	55,640	175,480	
				71600	Travel	28,355	39,590	23,540	91,485	
				72100	Contract Services - Company	195,810	430,140	192,600	818,550	
				63400	Learning Costs	299,600	411,950	230,050	941,600	
				74200	AV & Publications	10,700	0	9,630	20,330	
	SUBTOTAL					**756,490**	**1,191,980**	**666,610**	**2,615,080**	
Component D: Twinning Arrangements for River Basins and Coastal Seas Management	PRF		GEF	71200	International Consultants	74,900	58,850	37,450	171,200	4
				71300	Local Consultants	26,750	26,750	21,400	74,900	
				71600	Travel	12,305	12,305	17,655	42,265	
				72100	Contract Services - Company	324,210	269,640	162,640	756,490	
				63400	Learning Costs	74,900	128,400	42,800	246,100	
				74200	AV & Publications	2,140	4,280	5,350	11,770	
	SUBTOTAL					**515,205**	**500,225**	**287,295**	**1,302,725**	
Component E: Intellectual Capital and Human Resources	PRF		GEF	71200	International Consultants	55,640	86,670	38,520	180,830	5
				71300	Local Consultants	37,450	51,360	29,960	118,770	
				71600	Travel	27,820	32,100	16,050	75,970	
				72100	Contract Services - Company	149,800	485,780	418,370	1,053,950	
				72400	Expendable Equipment	37,450	21,400	21,400	80,250	
				72800	IT software	21,400	26,750	16,050	64,200	
				73300	IT Licensing	10,700	10,700	10,700	32,100	
				63400	Learning Costs	160,500	133,750	107,000	401,250	
				74200	AV & Publications	16,050	16,050	16,050	48,150	
	SUBTOTAL					**516,810**	**864,560**	**674,100**	**2,055,470**	
Component F: Investment and Financing	PRF		GEF	71200	International Consultants	67,947	60,000	50,000	177,947	6
				71300	Local Consultants	11,770	26,165	25,680	63,615	
				71600	Travel	5,000	5,000	5,000	15,000	
				72100	Contract Services - Company	25,000	50,000	50,000	125,000	
				63400	Learning Costs	0	10,000	25,000	35,000	
				74200	AV & Publications	0	5,000	10,000	15,000	
	SUBTOTAL					**109,717**	**156,165**	**165,680**	**431,562**	

GEF OUTCOME/ATLAS ACTIVITY	Res. Party - Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	Atlas Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
Component G: Strategic Partnership Arrangements	PRF		GEF	71200	International Consultants	66,050	66,050	66,050	198,150	7
				71300	Local Consultants	70,620	83,995	78,645	233,260	
				71600	Travel	18,025	33,025	20,350	71,400	
				72100	Contract Services - Company	8,025	57,780	13,375	79,180	
				63400	Learning Costs	0	53,500	42,800	96,300	
				72800	IT Equipment & Software	10,700	2,675	2,675	16,050	
				74200	AV & Publications	0	10,700	10,700	21,400	
	SUBTOTAL					**173,420**	**307,725**	**234,595**	**715,740**	
Component H: Corporate Sector Responsibility	PRF		GEF	71200	International Consultants	62,100	63,000	63,150	188,250	8
				71300	Local Consultants	15,408	23,483	15,408	54,299	
				71600	Travel	14,550	22,100	15,700	52,350	
				72100	Contract Services - Company	30,640	185,400	128,690	344,730	
				63400	Learning Costs		6,050	71,300	77,350	
				74200	AV & Publications		11,050	11,400	22,450	
	SUBTOTAL					**122,698**	**311,083**	**305,648**	**739,429**	
Project Management	PRF		GEF	71200	International Consultants	160,000	160,000	160,000	480,000	9
				71400	Contract Services - Individual	42,800	42,800	42,800	128,400	
				71600	Travel	23,950	23,500	11,750	59,200	
				72500	Office Supplies	26,750	26,750	26,750	80,250	
				73400	Equipment Maintenance	21,400	21,400	26,750	69,550	
				74100	Professional Services	20,000	40,000	42,858	102,858	
				75100	Facilities (Security)	3,000	3,500	3,500	10,000	
	SUBTOTAL					**297,900**	**317,950**	**314,408**	**930,258**	
	GEF-SUPPORTED PROJECT TOTAL					**3,089,407**	**4,405,215**	**3,381,714**	**10,876,336**	
	COUNTRY-SUPPORTED PROJECT TOTAL					**299,998**	**299,999**	**300,003**	**900,000**	
	GRAND TOTAL					**3,389,405**	**4,705,214**	**3,681,717**	**11,776,336**	

Summary of Funds*

FUND SOURCE	Component A	Component B	Component C	Component D	Component E	Component F	Component G	Component H	Project Management	TOTALS
GEF	1,462,262	623,810	2,615,080	1,302,725	2,055,470	431,562	715,740	739,429	930,258	10,876,336
Governments*	2,108,000	3,022,000	13,361,200	6,825,000	1,858,200	320,000	100,000			27,594,400
Other Partners/ Collaborators**					5,780,000					5,780,000
TOTALS	**3,570,262**	**3,645,810**	**15,976,280**	**8,127,725**	**9,693,670**	**751,562**	**815,740**	**739,429**	**930,258**	**44,250,736**
In-Kind Support*										
Cambodia	55,000		510,000	5,000	150,000					720,000
China	27,000	20,000	3,400,000	5,000,000	34,200	150,000				8,631,200
Indonesia	150,000	100,000	1,000,000	500,000	250,000	150,000	100,000			2,250,000
Philippines	575,000	152,000	1,241,200	50,000	50,000	20,000				2,088,200
RO Korea	285,000	2,750,000	5,200,000	1,260,000	1,234,000					10,729,000
Thailand	116,000		2,010,000	10,000	140,000					2,276,000
SUBTOTAL										**26,694,400**
In Cash for PRF Secretariat Services*										
China	375,000									375,000
Japan	125,000									125,000
RO Korea	400,000									400,000
TOTALS	**2,108,000**	**3,022,000**	**13,361,200**	**6,825,000**	**1,858,200**	**320,000**	**100,000**	**0**	**0**	**27,594,400**

* *confirmed co-financing as of 31 March 2007*

** *including UNDP Small Grant Programme financing for associated activities in capacity development ($1million), as well as in-kind capacity development support from MERIT, City University of Hong Kong ($5.78 million).*

Budget Notes

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
Component A/ Budget Note 1	*International Consultants*	*134*	*71,690*	*1. 6-year framework of partnership programs developed and agreed to among Partners, and submitted to Council);* *2. Voluntary Partnership Fund developed and agreed to among donors and Partners, and submitted to Council.*
	International Consultants (Gov't Co-financing)	*1,560*	*559,187*	*1. Secretariat services provided to the EAS Partnership Council, Executing Committee, Ministers Forum and EAS Congress;* *2. EAS Congress organized and conducted in 2009;* *3. SDS-SEA implementation program synthesized, evaluated and reported to Council;* *4. Partnership programs/capacity development for SDS-SEA implementation organized and conducted.*
	Local Consultants	*816*	*262,043*	*1. Technical advice/support provided to local and national governments in the preparation of bottom-up national State of Coasts report;* *2. National reports rolled up into Regional State of Coast report 2009, prepared, published and submitted to the EAS Congress 2009/Ministerial Forum.*
	Local Consultants (Gov't Co-financing)	*1,560*	*185,723*	*1. Regional and sub-regional workshops, meetings , seminars and conferences organized and conducted in support SDS-SEA implementation;* *2. SDS-SEA monitoring program coordinated at the subregional and national levels, monitoring report prepared annually;* *3. Communication plan for SDS-SEA implementation prepared and implemented.*
	Contract Services-Individual (Gov't Co-financing)	*2340*	*155,090*	*1. General accounting and financing (budgeting) services for the PRF Secretariat and Technical Services performed;* *2. Administrative services of the PRF Secretariat and Technical Services managed, including but not limited to recruitment, personnel administration and documentation, secretarial services, purchasing, supplies coordination, transport, equipment maintenance and repair, shipping, logistics support, documents reproduction, housekeeping, and office security.*
	Contract Services-Company		*363,800*	*1. State of Coasts reporting system, complete with relevant process, stress reduction and environmental and social status indicators, developed and agreed to among countries and stakeholders;* *2. Consultative process implemented among countries, regional programs/projects regarding long-term, self-sustaining regional arrangement with its own legal identity;* *3. Regional conference/workshop organized;* *4. Action Plan drafted and submitted to Council;* *5. Action Plan initiated, including organization of a diplomatic conference.*
	Learning Costs		*480,965*	*1. 2 regional workshops on regional framework of partnership programs;* *2. regional forum on the development and implementation of the regional Partnership Fund;* *3. 3 EAS Partnership Council Meetings and 7 Executive Committee Meetings;* *4. EAS Congress 2009;* *5. 2 regional workshops on SOC;* *6. series of seminars/consultative workshops*

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
				regarding Plan of Action for PEMSEA transformation; *7. one regional workshop/conference on PEMSEA transformation.*
	Travel		*139,110*	*1. travel costs for 17 regional workshops, seminars and meetings.*
Component B/ Budget Note 2	*International Consultants*	*420*	*224,700*	*1. Common framework methodology and indicators for assessing social and economic contributions of coastal and marine sectors developed;* *2. Regional consensus achieved on methodology among countries;* *3. Training/technical support provided to countries adopting/implementing methodology;* *4. Regional forum organized/conducted for policymakers/legislators on outcomes.*
	Local Consultants	*147*	*47,080*	*1. Technical support/capacity development in the implementation of the agreed framework methodology in two countries.*
	Contract Services-Company		*203,300*	*1. Capacity development/technical advice for national SDS policy development and formulation of 6-year country framework programs for SDS-SEA implementation in 5 countries, including policy reforms and programs for pollution reduction.*
	Learning Costs		*107,000*	*1. one regional workshop on framework and methodology for assessing social and economic contributions of marine and coastal areas/sectors;* *2. one regional forum on outcome of country assessments;* *3. 5 national training workshops on the development and implementation of 6-year country framework program and national SDS policy.*
	Travel		*36,915*	*1. travel costs associated with two regional workshops/forums* *2. travel costs for resource persons in; support 5 national training workshops.*
	AV & Publications		*4,815*	*1. publication/dissemination of two case studies on national assessments of marine sector contributions to GPAs;* *2. publication/dissemination of methodologies/indicators for country assessments*
Component C/ Budget Note 3	*International Consultants*	*1061*	*567,635*	*1. Leadership Forums organized in 5 countries regarding ICM scaling up programs* *2. Technical assistance/advice provided for ICM policies/policy reforms, establishment of interagency, multisectoral coordinating bodies, and 6-year action plans and targets for ICM scaling up programs in 5 countries;* *3. ICM learning networks organized in 3 countries;* *4. ICM training manual, and practical guides prepared for regional and national training-of-trainers;* *5. ICM Code and manual developed;* *6. ICM Code tested/demonstrated at 2 ICM sites;* *7. PSHEMS recognition demonstrated and extended as PRF service.*
	Local Consultants	*547*	*175,480*	*1. ICM case studies prepared for use in national/regional ICM training);* *2. Local training/capacity development and coaching of local government personnel and managers implemented in support of development and implementation of ICM projects;* *3. Good practices in ICM policy and practices at the local level documented for promotion and replication;*

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
				4. Monitoring and evaluation of ICM initiatives and impacts completed, and results included in State of Coasts report.
	Contract Services-Company		*818,550*	*1. Regional and national training workshops for trainers and managers organized and conducted;* *2. ICM Code training/demonstration conducted at two ICM sites;* *3. ICM certification/recognition scheme formulated in consultation with countries, local governments and interested regional organizations, and submitted to Council for adoption;* *4. PSHEMS training/demonstration conducted in 3 ports;* *5. PSHEMS certification/recognition scheme formulated in consultations with the countries, regional port associations and the maritime industry, and submitted to Council for adoption.*
			941,600	*1. 3 regional leadership forums conducted on ICM scaling up;* *2. 5 national training workshops on ICM policy/legislation;* *3. regional capacity development workshops on SOC report;* *4. ICM learning networks established/operating in 3 countries;* *5. 3 regional RTF trainers-training and 10 national NTF training conducted;* *6. 4 training workshops on ICM Code implementation;* *7. 2 training workshops on ICM certification/ recognition;* *8. one regional workshop on ICM Code application and replication;* *9. training workshops on PSHEMS application.*
	Travel		*91,485*	*1. resource persons travel to 16 regional training workshops and forums;* *2. resource persons travel to 10 national training workshops on ICM policy, and PSHEMS applications*
	AV & publications		*20,330*	*1. publication and dissemination of ICM training manual, ICM code and manual, PSHEMS code and manual, ICM case studies, ICM good policies and strategies.*
Component D/ Budget Note 4	*International Consultants*	*320*	*171,200*	*1. Twinning arrangements/agreements identified and facilitated among south-south and north-south practitioners in integrated river basin and coastal area management in 4 regional pollution hotspots;* *2. Annual workshops organized to facilitate sharing of information/knowledge among sites;* *3. Twinning arrangements evaluated to determine benefits derived from skills and knowledge-sharing program;* *4. Replication plan developed and promoted to other sites/pollution hotspots in the region;* *5. Regional workshop organized at EAS Congress 2009.*
	Local Consultants	*233*	*74,900*	*1. Regional secretariat on twinning arrangements established;* *2. Case studies on experiences and lessons learned in twinning arrangements completed, evaluated at the country level and presented to EAS Congress 2009;* *3. Monitoring and evaluation of river basins and coastal area management initiatives and impacts completed, and results included in State of Coasts*

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
				report.
	Contract Services-Company		*756,490*	*1. Replication opportunities for the implementation of innovative pollution reduction policies, technologies and practices identified among the three priority hotspots sites in the region, and promoted among national and local governments, international financial institutions and donors, investors, and the private sector through national and regional forums;* *2. Investment plans for pollution reduction in the selected priority watersheds in the Bohai Sea, Manila Bay and Jakarta Bay completed in support of national and local government initiatives;* *3. Technical advice/support for the three countries in the Gulf of Thailand for institutionalization and sustainability of the adopted Framework Program;* *4. Technical advice/assistance provided to national and local governments in preparing/adopting policy reforms and innovative approaches to enhance investments in pollution reduction at the hotspot locations.*
	Learning Costs		*246,100*	*1. 3 regional training workshops conducted in support of PNLG;* *2. River basin and coastal area management twinning workshops conducted at 4 pollution hotspot locations;* *3. one regional workshop conducted to share lessons among twinning sites.*
	Travel		*42,265*	*1. resource persons travel to 8 regional workshops*
	AV & publications		*11,770*	*1. methodology for development of river basin and coastal area investment plans for pollution reduction published and disseminated;* *2. case study on the implementation of the methodology published and disseminated;* *3. case studies on 2 twinning arrangements published and disseminated.*
Component E/ Budget Note 5	*International Consultants*	*338*	*180,830*	*1. Scheme for establishing, evaluating and sustaining PEMSEA-accredited RTF and NTFs developed and adopted, including code of conduct;* *2. 3 regional training organized for RTF covering ICM policy and program scaling up, river basins and coastal area management, and State of Coasts reporting;* *3. NTFs for ICM program implementation initiated in 3 countries, with technical support/back-up by the RTF;* *4. Effectiveness of RTF/NTFs evaluated/reported to EAS Partnership Council 2008, along with recommendations for strengthening and sustainability;* *5. RTF/NTFs incorporated into the business plan of the PRF, and presented to Council for adoption.*
	Local Consultants	*370*	*118,770*	*1. NTFs provide technical advice and assistance to local governments for ICM program development and implementation in 3 countries;* *2. 10 national ICM training workshops organized and conducted;* *3. IIMS database developed at ICM sites; training of local data providers/users provided;* *4. IIMS networking established among ICM sites and national coordinator, in support of national ICM monitoring and evaluation and State of Coasts reporting;* *5. Regional forum for NGO/community groups*

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
				organized and conducted, to share knowledge and lessons learned from SGP implementation.
	Contract Services-Company		*1,053,950*	*1. AOE work programs established/implemented at two internationally and regionally recognized Areas of Excellence in support of SDS-SEA implementation;* *2. Regional workshop organized and conducted during the EAS Congress 2009 regarding the application of management-related science to SDS-SEA implementation;* *3. 10 specialized skills training workshops organized and conducted in environmental risk assessment, coastal use zoning, natural resource damage assessment, and IIMS development and applications;* *4. Post graduate ICM curriculum developed and implemented within universities in the region;* *5. Internships and senior fellowships programs developed and implemented;* *6. PNLG strengthened as an advocacy group for ICM program development and implementation through series of workshops (3) and the establishment of self-sustaining PNLG Secretariat.*
	Learning Costs		*401,250*	*1. one regional workshop on operating modality and accreditation of RTF/NTF members;* *2. 3 regional trainers-training workshops on special skills;* *3. 10 special skills training workshops;* *4. two regional workshops on AOE program development and implementation;* *5. one experts workshop on ICM curriculum development;* *6. one regional workshop for NGOs/CBOs/POs implementing SGP projects.*
	Travel		*75,970*	*1. resource persons travel for 18 regional workshops and special skills trainings*
	Expendable equipment		*80,250*	*1. equipment for PEMSEA information portal and knowledge center, in accordance with IW-LEARN IT guide*
	IT software		*64,200*	*1. software for PEMSEA information portal and knowledge center, in accordance with IW-LEARN IT guide*
	IT licensing		*32,100*	*1. IT licensing (annual) for software/server access for PEMSEA information portal and knowledge center, in accordance with IW-LEARN IT guide*
	AV & publications		*48,150*	*1. publication and dissemination of specialized skills training programs and manuals, case studies on RTF/NTF program, and case studies on AOE initiatives and good practices developed/replicated.*
Component F/ Budget Note 6	*International Consultants*	*333*	*177,947*	*1. Good policies and practices in PPP investment in pollution reduction facilities and services packaged and promoted for adoption among ICM sites and pollution hotspots;* *2. Advice and assistance provided to national and local governments regarding policy reforms and financing and incentive programs to enhance the PPP procurement process among local governments.*
	Local Consultants	*223*	*71,690*	*1. Opportunities and prerequisites for PPP implementation among local government units identified and evaluated;* *2. National and subnational workshops conducted to promote and facilitate investments in pollution*

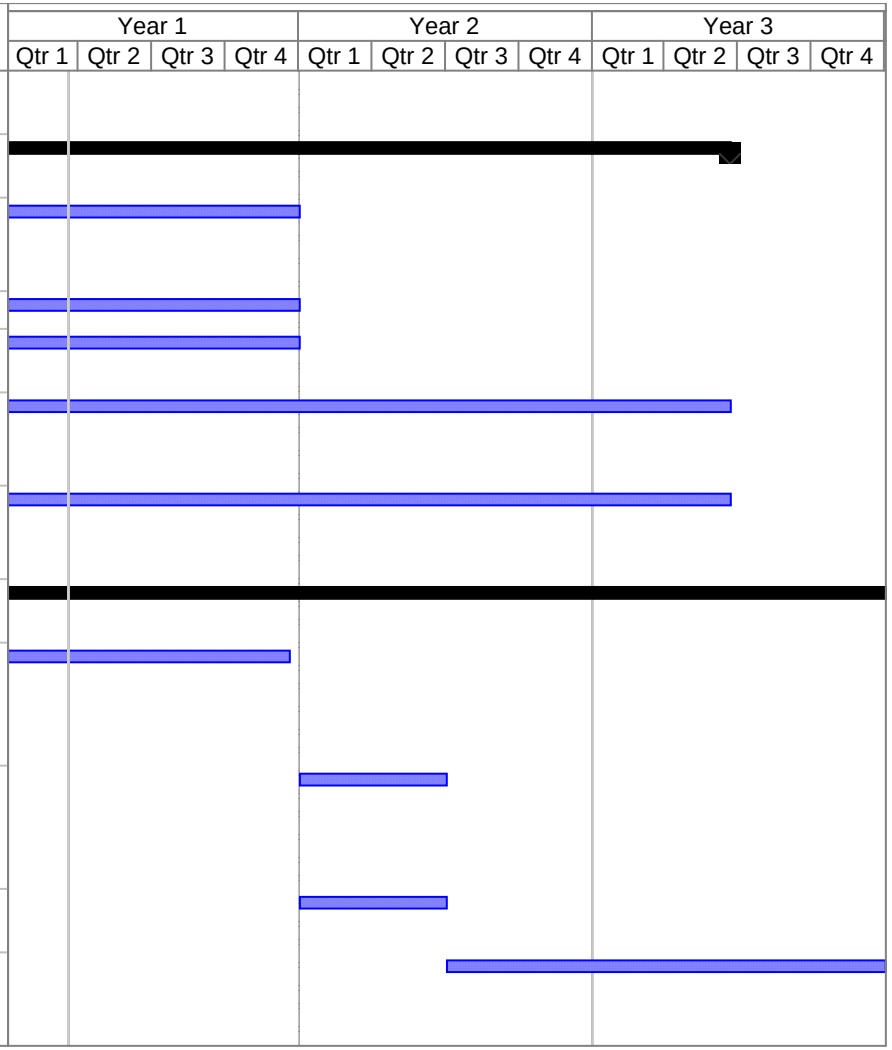
Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
				reduction/waste management facilities and services through PPP procedures.
	Contract Services-Company		*125,000*	*1. One-stop PPP support service developed and operationalized, in collaboration with the Project Preparation Revolving Fund (Component G) to provide local government units with technical assistance/support in developing bankable projects in pollution reduction/waste management);* *2. Interface established between financing facilities (i.e., public sector institutions; donors; private sector institutions) and proponents of pollution reduction/waste management projects;* *3. Cost recovery mechanism developed and promoted among project proponents, financing facilities and the governing body of the Project Preparation Revolving Fund, in order to sustain the operation of the one-stop PPP support service as a component of the PRF.*
	Learning Costs		*35,000*	*1. one regional workshop conducted on corporate/business sector participation in ICM/EBM programs at the national and local government levels;* *2. one regional workshop conducted on innovative policies and investment programs in support of PPP procurement procedures;* *3. 4 national workshops conducted on PPP development and implementation at the local government level.*
	Travel		*15,000*	*1. resource persons travel to 2 regional workshops;* *2. consultants travel to project sites in support of investment project development*
	AV & publications		*15,000*	*1. publication and dissemination of case studies, policies, practices and investment approaches in support of PPP replication at ICM sites*
Component G/ Budget Note 7	*International Consultants*	*370*	*198,150*	*1. procedure developed and agreed to and implemented to assess replicability and scalability of projects proposed under the Partnership Investment Fund;* *2. external review conducted on the progress, outcomes and benefits derived from the Strategic Partnership.*
	Local Consultants	*727*	*233,260*	*1. Sub-projects of the Strategic Partnership are evaluated to determine if targets were achieved, as proposed, and to assess replicability and scalability in accordance with identified criteria;* *2. Communication plan/program organized for the Strategic Partnership to promote replication of good practices across the region;* *3. Results of subproject evaluations packaged and disseminated to subnational, national and regional (EAS Congress/EAS Partnership Council) forums;* *4. Good practices promoted among project proponents in ICM sites and pollution hotspots (Components C, D, and F) via the one-stop PPP service of the PRF.*
	Contract Services-Company		*79,180*	*1. 5 national and 2 regional workshops developed and conducted covering replication of good practices demonstrated under the Investment Fund;* *2. Mid-term stocktaking workshop organized and conducted to evaluate progress and impact of the Strategic Partnership and required improvements.*
	Learning Costs		*96,300*	*1. annual technical workshop and midterm stocktaking meeting of Partners and stakeholders;*

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
				2. regional workshop on innovative polices, investment mechanism, practices and technologies.
	Travel		*71,400*	1. consultants and resource persons travel to2 annual meetings, one midterm stocktaking meeting, and one regional workshop at the termination of the project.
	IT equipment and Software		*16,050*	1. SP website established and put into operation in accordance with IW-LEARN guide..
	AV & publications		*21,400*	1. 5 technical reports/evaluations on innovative sub projects of the Strategic Partnership published and disseminated; 2. Annual, midterm stocktaking and terminal workshop reports published and disseminated.
Component H/ Budget Note 8	*International Consultants*	*352*	*188,250*	1. Corporate responsibility program developed and promoted through regional and national forums; 2. Agreements negotiated and signed between the corporate and business sector and national/local government units regarding sharing of skills, resources and/or equipment to protect and restore coastal and marine resources in ICM sites and pollution hotspot locations; 3. Agreement signed with corporate champion; 4. Demonstration project developed and implemented in partnership with local community
	Local Consultants	*169*	*54,299*	1. technical support to local governments to identify and forge partnerships with local and national companies; 2. demonstration project implemented; 3. case studies prepared, replication opportunities identified.
	Travel		*52,350*	1. consultants travel to regional and national forums; 2. consultants travel to project sites to facilitate/coach local teams in project development and implementation 3. consultants travel to project sites to evaluiate outcomes/prepare good practices
	Contract Services-Company		*344,730*	1. methodology development adoption regarding corporate social responsibility assessment in coastal communities; 2. field test of methodology; 3. develop recognition system methodology; 4. regional workshop of CEOs, managers and policymakers regarding recognition system; 5. initiate PEMSEA recognition system for corporate responsibility in coastal communities.
	Learning Costs		*77,350*	1. two regional forums/workshops for multinational corporations, etc.; 2. 5 national workshops for national/local companies/private sector; 3. regional workshop on methodology for corporate responsibility assessment.
	AV & publications		*22,450*	1. publication and dissemination of multimedia materials promoting corporate social responsibility, based on Bataan and Batangas experiences; 2. publication and diseemination of methodologies and case study for assessing corporate sector responsibility; 3. publication and dissemination of recognition system for corporate social responsibility in coastal communities.

Logical framework Outcome/Budget Note	*Contractual Services*	*Consultants Time (person-days)*	*Contract Price(USD)*	*Targeted Outputs*
Project Management/ Budget Note 9	*International Consultants*	*780*	*480,000*	*Project management and administration*
	Contract Services - Individual	*2,340*	*128,400*	*Administrative/financial support*
	Travel		*59,200*	*Duty travel for Executive Director, support staff and Executive Committee members to annual EAS Partnership Council meetings, Executive Committee meetings, IW biennial conference, and related regional meetings/events*
	Office Supplies		*80,250*	*Supplies for regional program office operations*
	Equipment Maintenance		*69,550*	*Maintaining repairing office equipment for regional program operations*
	Professional Services		*102,858*	*Financial/project audits by external experts*
	Facilities O&M		*10,000*	*Office security, as required by UN*

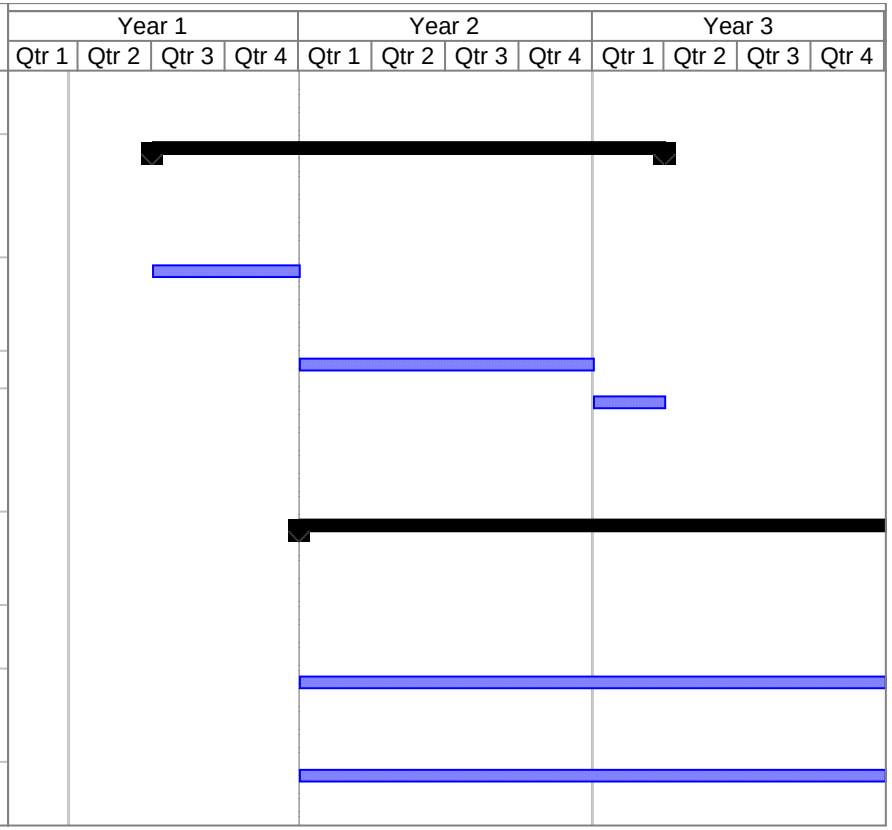
PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA

ID	Task Name
1	**COMPONENT A: A FUNCTIONAL REGIONAL MECHANISM FOR SDS-SEA IMPLEMENTATION**
2	**Output A.1: A country-owned regional mechanism for SDS-SEA implementation.**
3	A.1.1 Formulate and facilitate the adoption of a rolling 6-year framework of partnership programs for implementation of the SDS-SEA
4	A.1.2 Establish a voluntary regional Partnership Fund
5	A.1.3 Develop and implement a country-owned and sustainable PEMSEA Resource Facility (PRF)
6	A.1.4 Organize and put into practice the financing and operating arrangements for a tri-annual regional EAS Congress, including a Ministerial Forum
7	A.1.5 Develop and put into service, at the national and regional levels, a regular reporting system for the State of Coasts (SOC) report for the Seas of East Asia
8	**Output A.2: A Plan of Action for transforming PEMSEA into a long term, self-sustaining regional implementing**
9	A.2.1 Identify and evaluate the benefits and constraints of different operating and administrative arrangements and make recommendations to be considered by countries and their partners
10	A.2.2 Facilitate a review and approval process involving participating countries, regional and international partners for a Plan of Action to create PEMSEA as a long term, self-sustained regional mechanism
11	A.2.3 Submit the Plan of Action to the EAS Partnership Council for endorsement to Governments
12	A.2.4 Upon approval by Governments, initiate the implementation of the Plan of Action, including among others, preparation of working documents for the PEMSEA



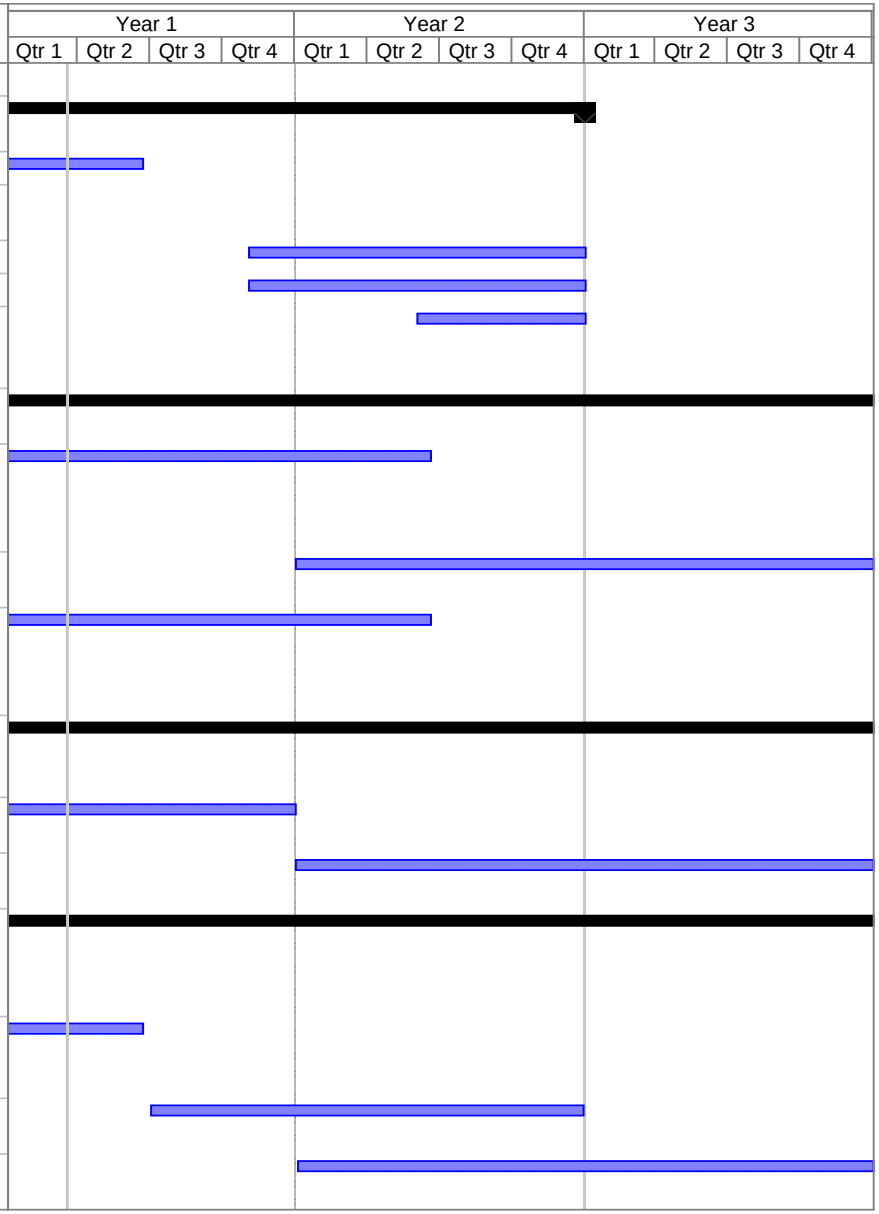
PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name
13	**COMPONENT B: NATIONAL POLICIES AND REFORMS FOR SUSTAINABLE COASTAL AND OCEAN GOVERNANCE**
14	**Output B.1: An agreed framework, methodology and indicators for social and economic contributions of coastal and marine areas/sectors developed and demonstrated in two countries of the region**
15	B.1.1 Organize a Regional Task Force to facilitate consensus among national and international stakeholders on a framework, methodology and appropriate indicators
16	B.1.2 Support the conduct of two national assessments
17	B.1.3 Organize a regional forum for senior managers and policy-makers covering social and economic contributions of coastal and marine areas/sectors and promoting policy reforms for strengthening coastal and ocean governance
18	**Output B.2: National policy, legislative and institutional reforms, and interagency and multi-sectoral coordinating mechanisms aimed at improved integrated management of**
19	***B.2.1 Promote and facilitate two (2) participating countries to develop, adopt and implement, and***
20	a. national SDS-SEA policy and national multi-sectoral and interagency coordinating mechanisms for the implementation of the SDS-SEA
21	b. 6-year framework plans for the implementation of the SDS-SEA



PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name
22	**COMPONENT C: SCALING UP ICM PROGRAMS**
23	**Output C.1: Institutional arrangements for national ICM programs in place**
24	C.1.1 Organize "Leadership Forums on ICM" in five (5) countries
25	***C.1.2 Facilitate two (2) participating countries to develop, adopt and implement, and three (3)***
26	a) national strategies/policies/legislation for ICM programs
27	b) 6-year action plans for ICM implementation
28	C.1.3 Set in place a systematic process for monitoring, evaluating and reporting the effectiveness of national and local ICM programs
29	**Output C.2: Capacity building strengthened for local government ICM programs**
30	C.2.1 Augment Bali (Indonesia), Batangas (Philippines), Chonburi (Thailand), Danang (Vietnam), Sihanoukville (Cambodia), Xiamen (PR China) and other ICM sites as working models
31	C.2.2 Set up ICM learning networks and ICM training programs in three (3) countries
32	C.2.3 Develop/update PEMSEA ICM training manuals, practical guides and case studies, translate them into local languages, and organize/facilitate the conduct of training at the regional, national and sub-national levels
33	**Output C.3: An ICM Code adopted by national and local governments for voluntary use as a standard for certification/recognition of ICM sites**
34	C.3.1 Develop and field test an ICM Code, audit guide and training program
35	C.3.2 Develop and implement the ICM Certification/Recognition system
36	**Output C.4: A PSHEM Code adopted and implemented by national governments and the private sector for voluntary use by port authorities and those companies operating in a port as a standard for certification/recognition**
37	C.4.1 Solicit international recognition of the PSHEM Code developed through IMO, ILO and other international agencies, authorities and associations
38	C.4.2 Implement a PSHEMS training program at three (3) selected ports
39	C.4.3 Develop and implement the PSHEMS Certification/Recognition System

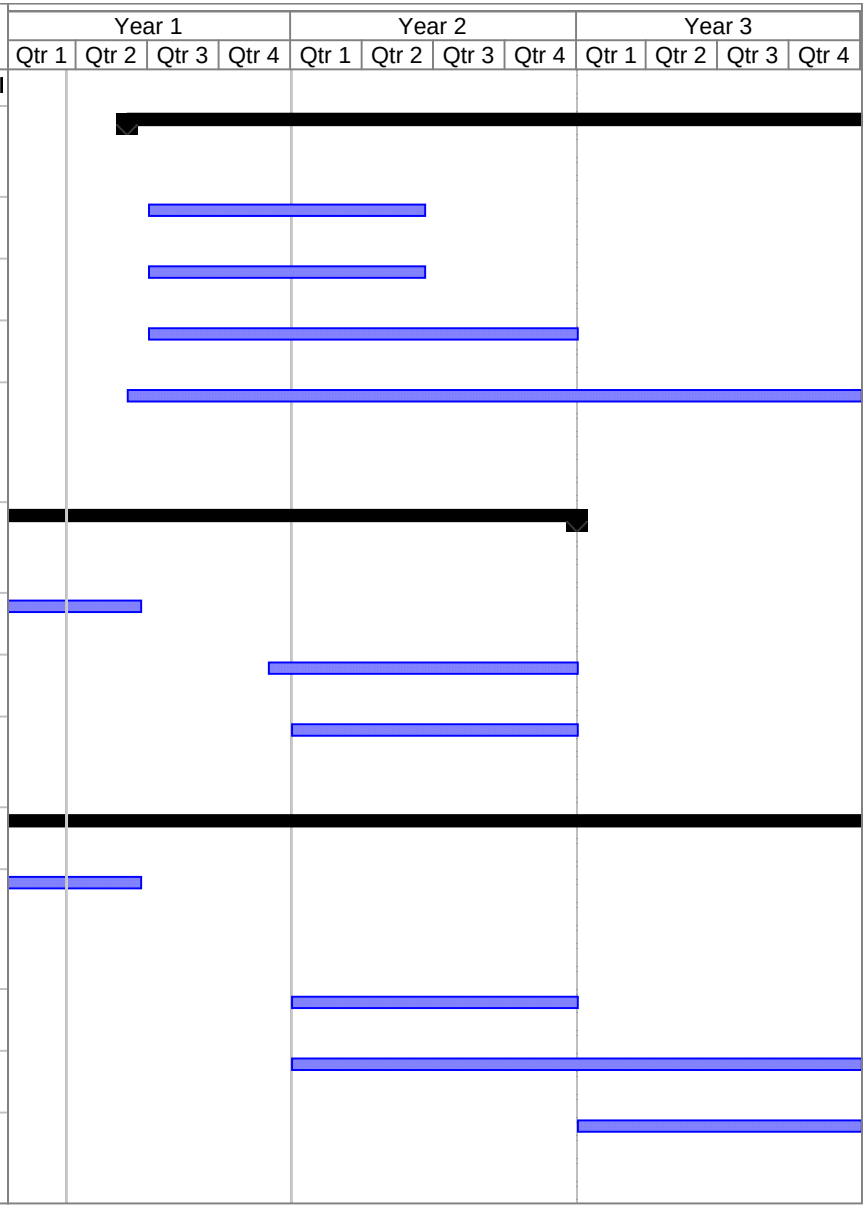


PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name	Year 1				Year 2				Year 3			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
40	**COMPONENT D: TWINNING ARRANGEMENTS FOR RIVER BASIN AND COASTAL AREA MANAGEMENT**												
41	**Output D.1: Regional twinning arrangements developed and implemented for river basin and coastal area management**												
42	D.1.1 Consult with potential candidate sites regarding their interests to participating in the proposed twinning activities, negotiate and sign MOAs/MOUs or similar agreements												
43	D.1.2 Set up a regional Twinning Secretariat as part of the PRF Secretariat												
44	***D.1.3 Formulate and initiate the implementation of site specific river basin and coastal area***												
45	a) Bohai Sea Sustainable Development Strategy (BS-SDS), focusing on a selected watershed area and addressing water pollution reduction and related financing and investment options												
46	b) the Manila Bay Coastal Strategy, covering an investment plan for sewage and sanitation facilities and services in the Pasig River-Laguna de Bay												
47	c) the Gulf of Thailand Joint Statement/Framework Programme, covering the set up of a sub-regional secretariat and implementation program												
48	d) an ecosystem-based management strategy and operational plan formulated and adopted for a selected watershed and coastal area within Jakarta Bay												
49	e) Case studies on the experience and lessons gained from the development of a total pollution load management (TPLM) plan for Masan-Chinhae Bay												
50	D.1.4 Promote and expand twinning arrangements to other priority watershed areas/sub-regional pollution hotspots												
51	D.1.5 Organize two regional workshops involving the twinning sites, twinning partners, and other interested												

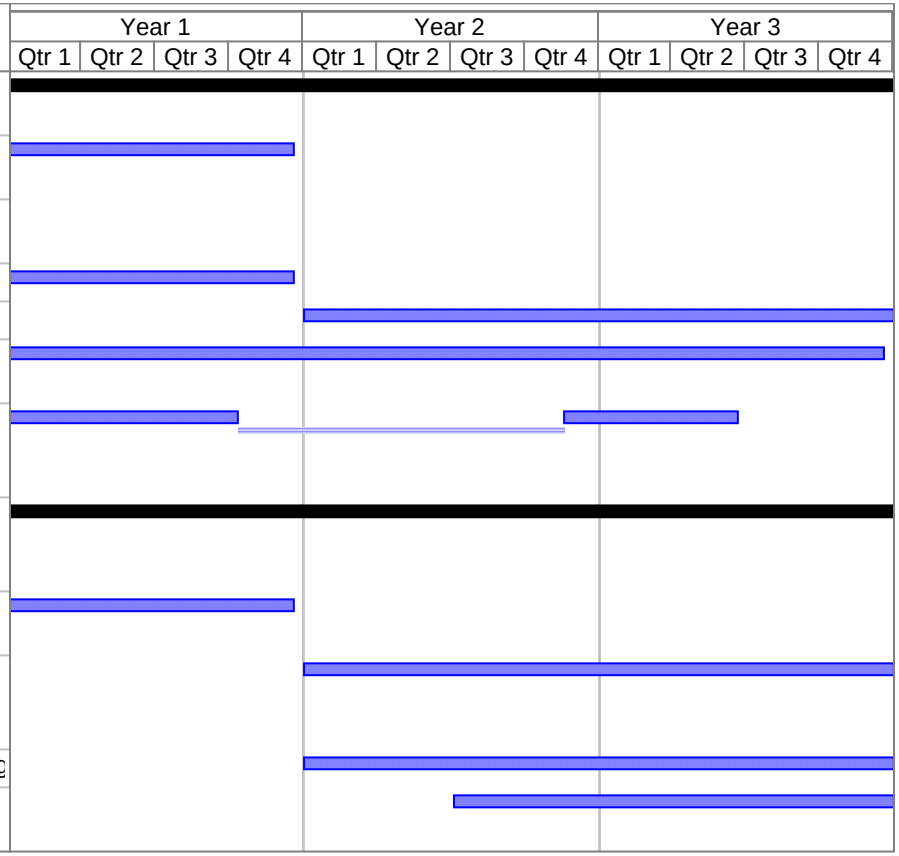
PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name
52	**COMPONENT E: INTELLECTUAL CAPACITY AND HUMAN RESOUI**
53	**Output E.1: An enhanced technical support network for countries, comprised of a Regional Task Force (RTF) and country-based National Task Forces (NTF)**
54	E.1.1 Set up a systematic mechanism for the mobilization of the RTF and NTFs
55	E.1.2 Identify a core of individuals in participating countries with ICM experience to serve as members of NTFs
56	E.1.3 Build and update the capacity of RTF and NTF members in response to country needs
57	E.1.4 Facilitate the use of RTF and NTF members in national and regional training workshops, and in facilitating the implementation of SDS-SEA at the local, national and sub-regional levels
58	**Output E.2: Areas of Excellence (AOEs) Programme and a regional network of universities/ scientific institutions supporting SDS-SEA implementation at the national and**
59	E.2.1 Negotiate partnership agreements with three (3) internationally and regionally recognized Areas of Excellence
60	E.2.2 Build linkages with national universities and donors to augment scientific support
61	E.2.3 Develop a reporting and information-sharing system to disseminate the outputs of the AoE Programme and networking of universities.
62	**Output E.3: Professional upgrade program, graduate scholarships and specialized training courses**
63	E.3.1 Delineate eligibility criteria, procedures and conditions regarding regional and international internships, fellowships/senior fellowships, and specialized training opportunities
64	E.3.2 Facilitate the development of a post-graduate ICM curriculum with selected universities in the region
65	E.3.3 Organize specialized training courses at the national and sub-regional levels
66	E.3.4 Monitor and evaluate the effectiveness of professional upgrading, graduate scholarships, and specialized training courses programs



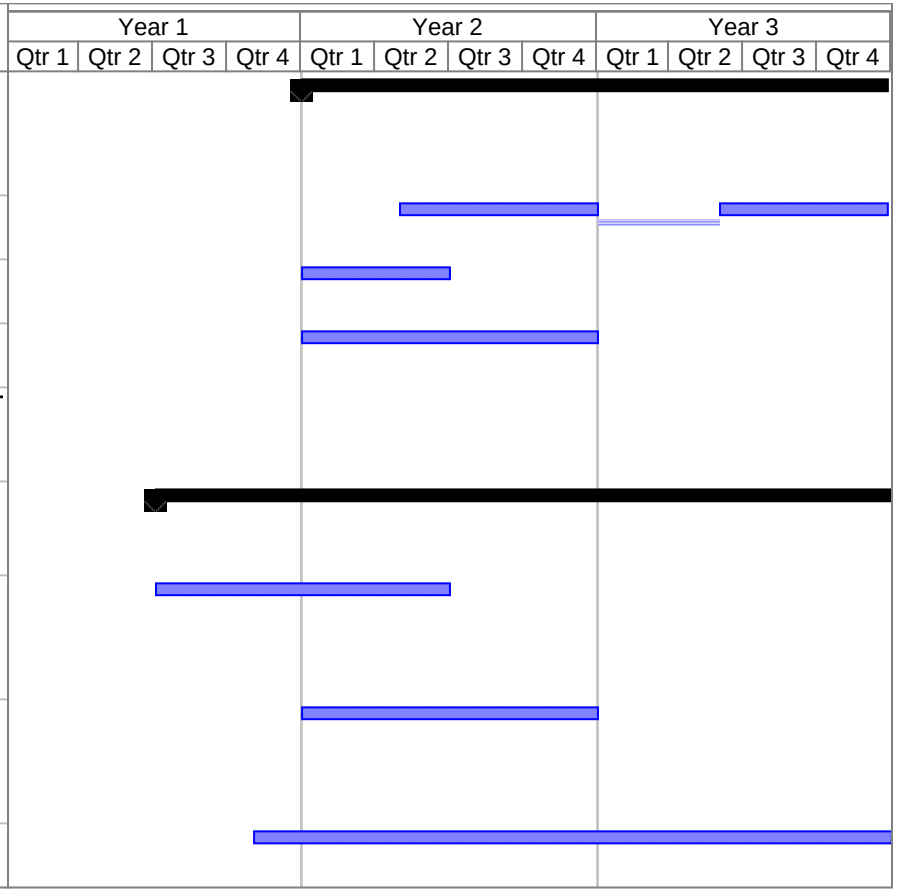
PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name
67	**Output E.4: An internet-based information portal in place, building awareness and transferring knowledge**
68	E.4.1 Strengthen PEMSEA's portal (www.pemsea.org) as an information node on the PEMSEA Regional
69	***E.4.2 Develop and implement information dissemination and knowledge sharing systems***
70	a) the GEF website, IW:LEARN
71	b) the EAS Congress
72	c) the knowledge-sharing, training, investment and IIMS networking components of the PRF
73	d) international and regional conferences, meetings and workshops organized by partners/collaborators, including the biennial GEF IW Conference
74	**Output E.5: Community based projects, including those addressing supplementary livelihood opportunities, developed and implemented at ICM sites**
75	E.5.1 Build partnerships/working arrangements with donor-supported programs in each country
76	E.5.2 Assist with the preparation and submission of projects proposals aimed at mobilizing community groups in the implementation of coastal strategies and
77	E.5.3 Facilitate capacity building activities for community g
78	E.5.4 Organize national and regional forums for NGO/community groups



PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name
79	**Output E.6: A self-sustaining regional network of local governments in place, operating and committed to achieving tangible improvements in the sustainable use and development of marine and coastal areas through**
80	E.6.1 Assist the PNLG is organizing capacity enhancing seminars and workshops as part of their annual
81	E.6.2 Provide technical support to Xiamen Municipal Government in initiating the operation of the PNLG
82	E.6.3 Strengthen Xiamen Municipal Government role/capacity in organizing "Oceans Week" on regular
83	**COMPONENT F: PUBLIC AND PRIVATE SECTOR INVESTMENT AND FINANCING IN ENVIRONMENTAL INFRASTRUCTURE PROJECTS AND SERVICES**
84	**Output F.1: Innovative national investment and financing policies and programs for public and private sector investment in pollution reduction facilities**
85	F.1.1 In conjunction with ICM scaling up initiatives (Component C) and river basin and coastal area management projects (Component D), package, promote and facilitate the adoption and implementation
86	F.1.2 Formulate and demonstrate methodologies for preparing integrated river basin-coastal area management investment plans focused on pollution reduction, for adoption and use by local governments,
87	F.2.3 Establish a one-stop PPP Support Service for local governments and the private sector

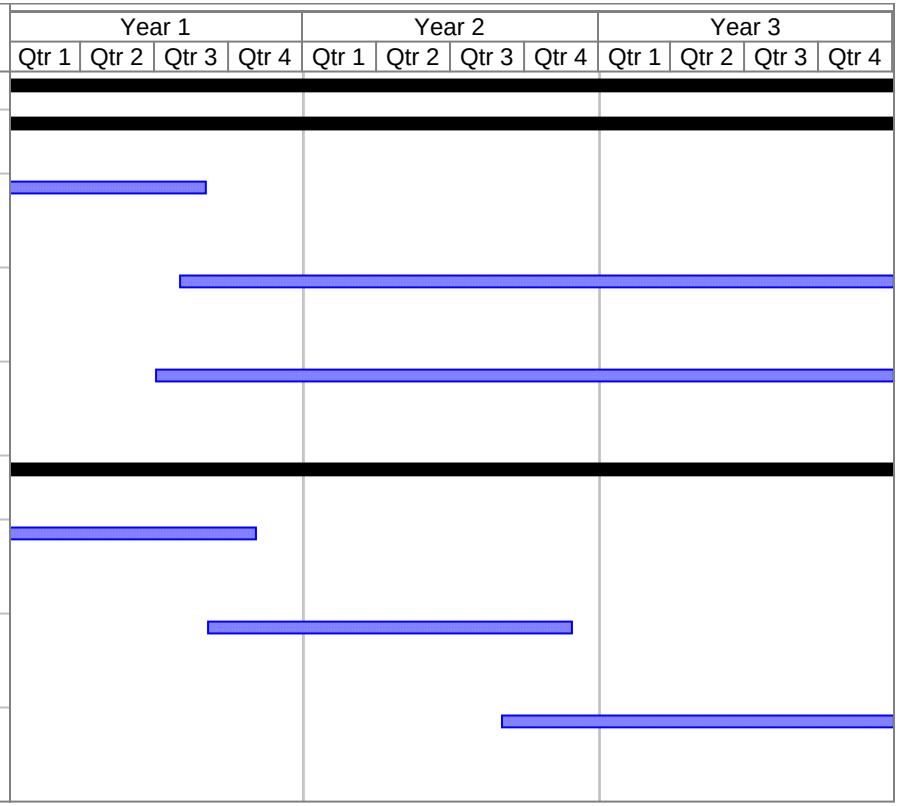


PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name	Year 1				Year 2				Year 3			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
88	**COMPONENT G: STRATEGIC PARTNERSHIP ARRANGEMENT**												
89	**Output G.1: Strategic Partnership coordination, communication, monitoring and evaluation mechanisms**												
90	G.1.1 Operationalize a Strategic Partnership Technical Team (SPTT) to coordinate the development, implementation, evaluation and promotion of the collaborative activities and outputs of the Strategic												
91	G.1.2 Organize and implement a communication/coordination program for the Strategic Partnership including a website, quarterly reviews/newsletters, regional conferences/workshops, etc. to review the progress and achievements of projects												
92	G.1.3 Monitor the progress of the Strategic Partnership through agreed indicators for the Partnership, as well as project specific indicators for each sub-project undertaken under the framework of the Strategic												
93	G.1.4 Evaluate, package and promote good practices of the Strategic Partnership, and sub-projects within the Partnership, disseminate good practices of the Strategic Partnership and sub projects via the EAS Congress, IW												
94	G.1.5 Develop linkages and strategic partnership arrangements with regional and international organizations and institutions, and donors, as well as the South China Sea, Yellow Sea, Sulu-Sulawesi Seas												

PROJECT WORK PLAN: IMPLEMENTATION OF THE SDS-SEA cont'd

ID	Task Name
95	**COMPONENT H: CORPORATE SOCIAL RESPONSIBILITY**
96	**Output H.1: Public-private partnership arrangements for ICM program development and implementation**
97	H.1.1 Develop multi-media materials and conduct seminars/forums for CEOs and senior managers of corporations (public and private), private industry and
98	H.1.2 Facilitate the development and implementation of partnership arrangements between corporations/industry and local governments and
99	H.1.3 Link up with a "corporate champion for sustainable development" to develop and implement a demonstration project on corporate social responsibility
100	**Output H.2: Corporate responsibility practices evaluated and recognized as a special relevance to achieving**
101	H.2.1 Modify and adopt monitoring and evaluation procedures (e.g., ISO 26000), as appropriate, to assess corporate policy, commitment and actions in aid of
102	H.2.2 Field-test the monitoring and evaluation procedures in collaboration with existing corporate partners who are working with local government units
103	H.2.3 Implement a corporate responsibility recognition system to promote and encourage private sector participation, resource commitments and investment for



ANNEX 1: PEMSEA'S 10-YEAR TRANSFORMATION PROGRAM

In October 2004, the 10th intergovernmental Programme Steering Committee (PSC) of the Regional Programme adopted a detailed Programme of Activities for the implementation of the SDS-SEA. Chief among the proposed activities was the development of a regional partnership arrangement. The 'regional partnership arrangement', as crafted by the countries, was based on four principles:

1. PEMSEA is the *de facto* implementing mechanism for the SDS-SEA;
2. the commitment by governments to establish a regional arrangement to implement the SDS-SEA is an essential step towards country-driven implementation;
3. the regional arrangement needs to build on the partnership foundation of PEMSEA, which is based on intergovernmental and intersectoral cooperation and collaboration in managing marine and coastal resources; and
4. a regional convention or other binding regional mechanism would be a difficult step for the countries to take in the short term, and should be left to future discussions.

The *Haikou Partnership Agreement and Partnership Operating Arrangements* were subsequently signed by countries and non-government partners in December 2006, thus establishing a new regional partnership arrangement for the implementation of the SDS-SEA.

PEMSEA has a record of solid achievement over the years. It has laid the technical, institutional and political foundations for greatly strengthened local, national and regional management. The momentum that has been generated by PEMSEA is instrumental in motivating national, regional and international efforts in promoting the concept and the practice of sustainable development for the seas and oceans. This momentum is critical in accelerating the commitment and the management actions of the governments and partners to implement the SDS-SEA. This is a pivotal moment in the evolution of PEMSEA's work, a moment at which additional resources and motivated partners can begin to reap the rewards of the investments that have been made by GEF and others. The East Asian region is too critical in the world economy, and its coasts and seas far too vital to the global environment, for it not to be able to access an appropriate share of GEF funding support at this time.

Time is required for effective partnerships for the environment to be established and take root, and more time is needed to consolidate the gains made towards the goals of SDS-SEA on a self-sustaining path. The proposed full project will be implemented over a 10-year period, as approved by GEF at Pipeline Entry. The first 3 years (2007-2010) will be the *transitional period*, in which countries, their partners and other stakeholders will develop, agree on, and commence the implementation of a 10-year framework of partnership programs under the SDS-SEA. The focus of activities will be: to initiate national level legal, policy and institutional strengthening for improved coastal and ocean governance; to facilitate the development and initiation of national ICM scaling up programs; to mobilize scientific, technical, legal, financial and community resources across the region in support of SDS-SEA implementation; and to strengthen coastal management capacities and technical and scientific skills in lesser developed countries of the region.

The first State of Coasts (SOC) report for the region will be prepared, tracking progress towards the 2015 targets of the respective national and regional 10-year program frameworks. A global outreach program will be established/implemented with the GEF-IW programme to facilitate the transfer of knowledge, good practices, skills and experience among GEF projects/regions.

A Plan of Action will also be developed and implemented by the EAS Partnership Council for the establishment of a long-term, self-sustaining regional mechanism for the implementation of the SDS-SEA. The long-term regional mechanism will be designed to move PEMSEA outside of the UN framework, and establish its own legal identify. The Plan of Action will be formulated and implemented in collaboration with Participating Countries and their partners.

The second 3 years will be the *transformation period* (2010-2013), in which national level policies, legislation and programs in coastal and ocean governance/ICM will be fully implemented/evaluated and refined in the more developed participating countries, while other countries with less capacity will continue to build capabilities/skills and experience in coastal and ocean governance, with the financial support of GEF. ICM learning networks, PEMSEA Programmes for Areas of Excellence, National Task Forces, the Regional Task Force and Strategic Partnership arrangements among international agencies and donors will be evaluated upgraded as required, and integrated into the 10-year partnership framework of programs for implementation of the SDS-SEA. The EAS Congress and the Ministers Forum will be confirmed as regular, sustainable components of the regional mechanism, serving as instruments for evaluating the progress and effectiveness of the partnership programme, and for reconfirming country and other stakeholder commitments. The State of Coasts reporting system will be integrated into the majority of national reporting systems, and the regional SOC report will serve as the primary source of information/knowledge on sustainable development of marine and coastal resources in East Asia, with linkages to a global sustainable development reporting system. The effectiveness and impact of the regional partnership arrangement will be evaluated, with the objective of formulating and agreeing on a long-term regional mechanism to replace or strengthen the partnership approach.

The long-term regional mechanism for SDS-SEA will be reviewed by the EAS Partnership Council, and endorsed for adoption by the participating countries and their partners.

The final 4 years will be the *sustainable operation period (2013-2017)*. The GEF will exit as a major regional sponsor of the project, and countries and their partners will take full responsibility for SDS-SEA implementation, and the sustainability of the long-term, regional mechanism. Capacity building and institutional strengthening in coastal and ocean governance for lesser developed countries of the region will continue to be a priority concern of the EAS Partnership Council/new regional operating arrangement. The Ministers Forum will review the achievements of the countries and their partners regarding implementation of the SDS-SEA, and the impact of such achievements on the people of the region, and will consider the endorsement of the second-cycle SDS-SEA as a guiding framework for the next 10-years.

The following table contains a matrix of project components versus country participation for the 10-year period 2007 to 2017. The table has been prepared in collaboration with participating countries during PDF-B deliberations and consultations on national priorities and areas of interest with respect to the GEF project.

COUNTRY PARTICIPATION IN THE GEF/UNDP/PEMSEA PROGRAMME ON THE IMPLEMENTATION OF SDS-SEA (2007-2017)

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Immediate Objective 1: To catalyze the implementation of action programs of the SDS-SEA aimed at legal, policy and institutional reforms, and investments, at the local, national and regional levels, with a particular focus on scaling up and sustaining integrated coastal management (ICM) practices to reduce coastal and marine degradation.														
Component A. A functional regional mechanism for SDS-SEA implementation														
Outcome 1: An intergovernmental, multi-sectoral EAS Partnership Council, coordinating, evaluating and refining the implementation of the SDS-SEA, and advancing the regional partnership arrangement to a higher level.														
Output A.1: A country-owned regional mechanism for SDS-SEA implementation.														
A.1.1 A rolling 6-year framework of partnership programmes for implementation of the SDS-SEA, addressing priority issues, identifying measurable and reasonable objectives and targets, confirming gaps and disparities in capacities to achieve identified goals.	1	1	1	2	1	1	2	1	2	1	2	1	1	1
A.1.2 A Regional Partnership Fund (RPF) with seed contributions from donors and countries, operating in accordance with management and disbursement rules and operational procedures, for the purpose of strengthening capacities across the region for SDS-SEA implementation.													1	1
A.1.3 A country-supported, sustainable PEMSEA Resource Facility (PRF) providing: a) secretariat services to the EAS Partnership Council; and b) policy and technical support services to participating countries and other stakeholders, in collaboration with ongoing projects and programs especially those supported by GEF and other partners.	3	1	2	3	1	2	3	2	2	1	2	1		
A.1.4a EAS Congress 2009 successfully implemented, co-sponsored by governments and collaborating organizations, including a Minister's Forum providing policy direction on the implementation of the SDS-SEA from 2010 to 2012.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
A.1.4b EAS Congress 2012 successfully implemented in accordance with the business plan adopted by the EAS Partnership Council, thereby confirming the sustainability of the triennial event, including a Minster's Forum providing policy direction on the regional mechanism and the implementation of the SDS-SEA from 2013 to 2015.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
A.1.4c An EAS Congress 2015 successfully implemented in accordance with the business plan, including a Minster's Forum providing policy direction on the regional mechanism and the implementation of the SDS-SEA from 2016 to 2019.	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
A.1.5a A reporting system for the State of Coasts (SOC) for the Seas of East Asia developed, national SOC reports completed, and a regional SOC report submitted to the EAS Congress 2009.		1	1		1	1		1		1		1	1	
A.1.5b A reporting system for the State of Coasts (SOC) for the Seas of East Asia refined and expanded with linkages to global reporting, national SOC reports completed, and a regional SOC report submitted to the EAS Congress 2012.	2	2	2		2	2		2	2	2	2	2	2	2
A.1.5c A sustainbale reporting system for the State of Coasts (SOC) for the Seas of East Asia confirmed, with inputs to a global reporting/evaluation system for sustainable development, national SOC reporting systems in place, and a regional SOC report submitted to the EAS Congress 2015.	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Output A.2: A long-term regional mechanism for the implementation of the SDS-SEA														
A.2.1a A fully functional intergovernmental, multi-sectoral EAS Partnership Council, meeting every 18 months, assessing progress, taking corrective actions and continually improving a 6-year regional partnership framework programme for SDS-SEA implementation.	1	1	1	1	1	1	1	1	1	1	1	1	1	
A.2.1b A Plan of Action for transforming PEMSEA into a long-term regional mechanism adopted by the EAS Partnership Council.	1	1	1	1	1	1	1	1	1	1	1	1	1	
A.2.2 A long-term regional mechanism for SDS-SEA implementation identified and endorsed by the EAS Partnership Council, and adopted by the countries.	2	2	2	2	2	2	2	2	2	2	2	2	2	
A.2.3 A sustainable regional mechanism for the implementation of the SDS-SEA put into practice.	3	3	3	3	3	3	3	3	3	3	3	3	3	

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Component B: National policies and reforms for sustainable coastal and ocean governance														
Outcome 2: National policies and programs on sustainable coastal and ocean development mainstreamed into social and economic development programs of participating countries														
Output B.1 An agreed framework, methodology and indicators for social and economic contributions of coastal and marine areas/sectors developed and demonstrated in two countries of the region.														
B.1.1 A common framework, methodology, procedures and indicators developed, adopted and applied for assessing social and economic contributions of coastal and marine areas/sectors.	1	1	1		1	1		1		1	1	1	1	1
B.1.2 National assessments of the social and economc contributions of coastal and marine areas/sectors completed	3	2	3		1	2	3	2		2	2	1		
B.1.3 Regional Forum promoting policy reforms for strengthening coastal and ocean governance													1	
Output B.2: National policy, legislative and institutional reforms, and interagency and multi-sectoral coordinating mechanisms aimed at improved integrated management of marine and coastal areas in place in 70% of participating countries by 2015.														
B.2.1 National strategies, policies and action plans for sustainable coastal and ocean development formulated and initiated/implemented in 70% of the participating countries by 2015.	2	2	2		2	2	3	1		2		1		
B.2.2 National interagency and multisectoral coordinating mechanisms established for the implementation of SDS-SEA.	2	1	2	3	1	2	3	1		2		1		
B.2.3 6-year rolling national framework plans developed, adopted and initiated/implemented, including ICM scaling up programs, strategies, time-bound management targets, priority actions and implementing arrangements.	2	1	2	3	1	2	3	1		2		1		

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Component C: Scaling-up ICM Programs														
Outcome 3: Integrated coastal management (ICM) scaled up as an on-the-ground framework for achieving sustainable development of coastal lands and waters in at least 20% of the total coastline of the region by 2015.														
Output C.1: Institutional arrangements for national ICM programs in place														
C.1.1 "Leadership Forums on ICM" conducted in countries to mobilize national policymakers, local leaders and coastal managers to support and initiate the development of national ICM policy, legislation and programs.	1	1	1	3	1	2	3	1		2		1		
C.1.2a National ICM strategies/policies/legislation for ICM progrgammes formulated/adopted/initiated/implemented.	1	1	1	3	1	2	3	1		2		1		
C.1.2b 6-year action programs for ICM implementation, with time-bound management targets and implementing arrangements formulated/adopted/initiated/implemented.	2	1	1	3	1	2	3	1		2		1		
C.1.3 Systematic process for monitoring, evaluating and reporting the effectiveness of national and local ICM programs set up and operational	2	1	1	3	1	2	3	1		2		1		
Output C.2: Capacity building and dedicated incentive packages established for local government ICM programs														
C.2.1 Bali (Indonesia), Batangas (Philippines), Chonburi (Thailand), Danang (Vietnam), Sihanoukville (Cambodia), Xiamen (PR China) and other ICM sites serving as working models in support of their respective national ICM scaling up programs.	2	1	1	3	1	2	3	1		2		2		
C.2.2 ICM learning networks and training programs established in participating countries	2	2	1	3	1	2	3	1		2		2	1	
C.2.3 ICM training programs conducted in collaboration with national ICM scaling up programs.	1	1	1	3	1	2	3	1		2		1	1	

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Output C.3: An ICM Code adopted by national and local governments for voluntary use as a standard for certification/recognition of ICM sites														
C.3.1 ICM Code, audit guide and training program developed, tested and promoted as a standard for certification/recognition of ICM sites.													1	1
C.3.2 ICM Certification/Recognition system developed, adopted and implemented in collaboration with national governments, the PNLG, donors, and other concerned stakeholders, as a service of the PEMSEA Resource Facility.	2	1	2	3	1	2	3	1		2		1	2	2
Output C.4: A PSHEM Code adopted and implemented by national governments and the private sector for voluntary use by port authorities and those companies operating in a port as a standard for certification/recognition of a Port Safety, Health and Environmental Management System (PSHEMS)														
C.4.1 International recognition of the PSHEM Code promoted through IMO, ILO and other international agencies, authorities and associations with concerns/focus on port development and operations.													1	1
C.4.2 PSHEMS training programs conducted to build capacity within the region to provide technical support/training in PSHEMS development.	1	2	2		2	1		1		2		2	2	
C.4.3 PSHEMS Certification/Recognition System implemented, in collaboration with national governments, private sector, donors, and other concerned stakeholders, as a service of the PEMSEA Resource Facility.	1	2	2		2	1		1		2		2	2	2

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Component D: Twinning arrangements for river basin and coastal area management														
Outcome 4: South-south and north-south twinning arrangements established for eco-system based management of watersheds, estuaries and adjacent coastal seas, promoting knowledge and experience sharing and collaboration for the implementation of management programs in environmental hotspots of the region														
Output D.1: Regional twinning arrangements developed and implemented for site-specific river basin and coastal area management programs														
D.1.1 MOAs/MOUs or similar agreements for twinning negotiated and signed among the developing and developed sites covering specific activities such as capacity building and training, staff exchanges, internships/on-the-job training, study tours/site visits, technology transfer, and technical cooperation and assistance.	1	1	1		1	1		1		1		1	2	2
D.1.2 Ecosystem-based Management Secretariat set up in Seoul, RO Korea, as part of the PRF to coordinate and facilitate activities across the sites, including training workshops and knowledge-sharing seminars.												1	1	
D.1.3a River basin and coastal area management projects developed and initiated in selected watersheds/coastal areas of sub-regional hotspots, including Bohai Sea, Manila Bay, Gulf of Thailand and Jakarta Bay, with the support of twinning arrangements	1	1	1		1	1		1		1		1	1	1
D.1.3b River basin and coastal area management programs formulated and initiated for replicating good practices across watershed areas within the sub-regional hotspot basins, including investment plans for pollution reduction and habitat restoration/rehabilitation.	2	2	2		2	2		2						
D.1.4 Twinning arrangements promoted and expanded to other priority watershed areas/subregional pollution hotspots, such as the Mekong River, Red River, and Pearl River.	1	1		1		1		1					1	1
D.1.5 Regional workshops organized involving the twinning sites, twinning partners, and other interested stakeholders to review and evaluate the results of the twinning activities, and the potential for replication in other areas.						1						1	1	1

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Immediate Objective 2: To verify, disseminate and promote the replication of lessons and best practices arising from the regional partnership arrangements in collaboration with IW: Learn and other partners.														
Component E: Intellectual capital and human resources														
Outcome 5: Use of the region's intellectual capital and human resources strengthened, and addressing policy, economic, scientific, technical and social challenges and constraints to integrated management and sustainable use of the marine and coastal environment and resources of the Seas of East Asia														
Output E.1: An enhanced technical support network for countries, comprised of a Regional Task Force (RTF) and country-based National Task Forces (NTF)														
E.1.1 A systematic process of expanding, strengthening and applying an RTF, comprised of regional experts and specialists, is put in place for use in policy, legal, technical and scientific aspects of scaling-up ICM and ecosystem-based management of watersheds and coastal areas throughout the region.													1	
E.1.2 Core of individuals serving as members of NTFs identified in participating countries and foced primarily on the development and implementation of national ICM scaling up programs.	2	2	1	3	1	2	3	1		2		2		
E.1.3 Build the capacity of RTF and NTF members, by conducting training workshops, training of trainers, on-the-job experience, and staff exchanges to provide practical experience.	2	2	1	3	1	2	3	1		2		2	1	
E.1.4 Facilitate the use of RTF and NTF members in national and regional training workshops, and in facilitating the implementation of SDS-SEA at the local, national and sub-regional levels.	2	2	1	3	1	2	3	1		2		2	1	
Output E.2: Areas of Excellence (AOEs) Program and a regional network of universities/ scientific institutions supporting SDS-SEA implementation at the national and local levels														
E.2.1 Partnership agreements negotiated and signed with regionally and internationally recognized Areas of Excellence; PEMSEA Programmes for Areas of Excellence in place		1			1								1	
E.2.2 Linkages with national universities and donors built to augment scientific support to national ICM programs and ecosystem-based management of watersheds and coastal areas.	2	1	1	2	1	1	2	1	2	1	1	1	1	1
E.2.3 Develop a reporting and information-sharing system to disseminate the outputs of the AoE program and networking of universities.													1	1

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Output E.3: Professional upgrade program, graduate scholarships and specialized training courses														
E.3.1 Eligibility criteria, procedures and conditions regarding regional and international internships, senior fellowships and specialized training opportunities within PEMSEA formulated and disseminated through PEMSEA portal, as well as among PEMSEA Partners, AoEs, and collaborating institutions.													1	1
E.3.2 Linkages established with universities granting post-graduate degree programs in coastal and ocean policy.													1	1
E.3.3 Post-graduate ICM curriculum developed with selected universities in the region.													1	1
E.3.4 Specialized training courses organized and conducted at the community, national and sub-regional levels, as appropriate, in collaboration with partners (i.e., environmental risk assessment; coastal use zoning; oil spill contingency planning and cost recovery; resource valuation and NRDA; PSHEM Code; ICM Code; and IIMS).	1	1	1	1	1	1	1	1	1	1	1	1	1	
E.3.5 The effectiveness of professional upgrading, graduate scholarships, and specialized training courses programs measured in accordance with agreed criteria, conditions and impact indicators.													1	
Output E.4: An internet-based capacity building, technical support system and information portal in place, building awareness and transferring knowledge and lessons learned														
E.4.1 PEMSEA's portal (www.pemsea.org) operating as a one-stop shop for awareness building, knowledge transfer and learning regarding national ICM scaling up programs and local, national and international partnership arrangements for SDS-SEA implementation, in collaboration with GEF IW Learn.													1	1
E.4.2 Information dissemination and knowledge sharing systems using four principal channels: a) the GEF website, IW:LEARN; b) the EAS Congress; c) the knowledge-sharing, training, investment and networking components of the PRF; and d) international and regional conferences, meetings and workshops organized by partners/collaborators, including the biennial GEF IW Conference.													1	1

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Output E.5: Opportunities established for community groups at ICM sites throughout the region in partnership with GEF/ UNDP Small Grants Programme and/or other community-based donor programs														
E.5.1 Partnerships/working arrangements built with donor-supported programs in each country, including the GEF Small Grants Programme (SGP) and/or other donor programs, which cater to capacity building of community groups and marginalized sectors of society.	1	2	1	2	1	1	2	1					1	1
E.5.2 Within the framework and capabilities of local ICM programs, the preparation and submission of projects proposals facilitated, aimed at mobilizing community groups in the implementation of coastal strategies and actions plans.	1	2	1	2	1	1	2	1					1	1
E.5.3 Capacity building activities and hands-on experience in community-based coastal resource management initiatives facilitated for community groups in support of site-specific coastal strategies and action plans.	1	2	1	2	1	1	2	1					1	1
E.5.4 National and regional forums organized for NGOs/community groups, as appropriate, to transfer experiences and knowledge on community-based resource management, the challenges, benefits and lessons learned.	1	2	1	2	1	1	2	1					1	
Output E.6: A self-sustaining regional network of local governments in place, operating and committed to achieving tangible improvements in the sustainable use and development of marine and coastal areas through ICM practices														
E.6.1 Capacity enhancing seminars and workshops facilitated as part of PNLG annual meetings, covering issues of key interest such as environmental investments, sustainable financing, community participation, and ICM recognition/certification.	1	1	1	2	1	1	2	1		1		1	1	
E.6.2 PNLG Secretariat establishment and start-up facilitated.		1											1	
E.6.3 “Oceans Week” organized by Xiamen Municipal Government as a regular international event involving local governments from around the globe, with the assistance of the PRF Secretariat.		1											1	

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Immediate Objective 3: To develop and coordinate strategic partnership arrangements between participating governments, international agencies, organizations and financial institutions, regional programs and projects, donors, the private sector and other stakeholders to stimulate public and private sector investments in sustainable coastal development and environmental infrastructure projects and services.														
COMPONENT F: Public and private sector investment and financing in environmental infrastructure project and services														
Outcome 6: Public and private sector cooperation achieving environmental sustainability through the mobilization of investments in pollution reduction facilities and services.														
Output F.1: Innovative national investment and financing policies and programs for public and private sector investment in pollution reduction facilities														
F.1.1 In conjunction with ICM scaling up initiatives (Component C) and river basin and coastal area management projects (Component D), package, promote and facilitate the adoption and implementation of policy reforms, innovative economic instruments, alternative revenue generating schemes, and appropriate institutional arrangements.	3	1	2	3	1	2	3	1						
F.1.2 Formulate and demonstrate methodologies for preparing integrated river basin-coastal area management investment plans focused on pollution reduction, for adoption and use with respect to the replication and scaling up of innovative technologies and practices (Component G).	3	1	1	3	1	2	3	1						
F.1.3 Establish a one-stop PPP Support Service for local governments, the private sector, financial institutions, and other interested stakeholders, in collaboration with Strategic Partners.													1	

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Component G: Strategic Partnership Arrangements														
Outcome 7: A Strategic Partnership for the Sustainable Development of the Seas of East Asia, functioning as a mechanism for GEF, the World Bank, the UNDP, and other international and regional partners to incorporate and coordinate their strategic action plans, programs and projects under the framework of the SDS-SEA, thus promoting greater sustainability and political commitment to the effort.														
Output G.1: A functional Strategic Partnership arrangement facilitating enhanced communication, knowledge sharing, scaling up and replication of innovative technologies and practices in pollution reduction across the LMEs of East Asia.														
G.1.1 Operationalize a Strategic Partnership Technical Team (SPTT) to coordinate the development, implementation, evaluation and promotion of the collaborative activities and outputs of the Strategic Partnership.													1	1
G.1.2 Organize and implement a communication/coordination program for the Strategic Partnership including a website, quarterly reviews/newsletters, regional conferences/workshops, etc. to review the progress and achievements of projects and sub-projects, and to promote the replication of good practices across the region and to other regions.													1	1
G.1.3 Monitor the progress of the Strategic Partnership through agreed indicators for the Partnership, as well as project specific indicators for each sub-project undertaken under the framework of the Strategic Partnership.													1	1
G.1.4 Package and disseminate multi-media materials regarding the Strategic Partnership and the related sub-projects to governments and stakeholders, the EAS Partnership Council, the EAS Congress, the Ministerial Forum, and other relevant regional and international forums.													1	1
G.1.5 Develop linkages and strategic partnership arrangements with regional and international organizations and institutions, and donors, as well as the South China Sea, Yellow Sea, Sulu-Sulawesi Seas and the Arafura and Timor Seas.													1	1
G.1.5b A sustainable, expanded Strategic Partnership arrangement endorsed by the EAS Partnership Council, as a component of the long-term regional mechanism for the implementation of the SDS-SEA.													2	2

Project Components (2007-2017) 1 2007-2010 2 2010-2013 3 2013-2017	Cambodia	China	Indonesia	Lao PDR	Philippines	Thailand	Timor Leste	Vietnam	Brunei	Japan	Singapore	RO Korea	Regional	Global
Outcome 8: Multinational and national corporations integrating social responsibility into their organizational strategies, programs and practices, and facilitating the replication and scaling up of capacities in sustainable development of marine and coastal resources among local governments and communities of the region.														
Output H.1: Partnership arrangements established and implemented between multinational and national corporations, industry, local governments and communities for sustainable development of marine and coastal resources.														
H.1.1 Develop multi-media materials and conduct seminars/forums for CEOs and senior managers of corporations, etc. in order to strengthen awareness and understanding of environmental sustainability, its linkages to economic and social development, and the use of ICM as an effective tool for governance of coastal and marine resources.													1	1
H.1.2 Facilitate the development and implementation of partnership arrangements between corporations/industry and local governments and communities, aligning private sector organizational goals for social responsibility with resource commitments and investments.	3	2	1	3	1	2	3	2					1	1
H.1.3 Link up with a "corporate champion for sustainable development" to develop and implement a demonstration project on corporate social responsibility in strategic issues/areas of concern to local governments.													1	1
Output H.2: Corporate responsibility practices evaluated and recognized as a special relevance to achieving social, environmental and economic benefits in coastal communities														
H.2.1 Modify and adopt monitoring and evaluation procedures (e.g., ISO 26000), to assess corporate policy, commitment and actions in aid of sustainable development of coastal communities and their natural resources based on PEMSEA's experience in ICM Code and PSHEMS Code and recognition system.													1	1
H.2.2 Field-test the monitoring and evaluation procedures in collaboration with existing corporate partners who are working with local government units and stakeholders at ICM sites.													1	1
H.2.3 Implement a corporate responsibility recognition system, in collaboration with national governments, private sector, donors, and other concerned stakeholders.													1	1

ANNEX 2: INCREMENTAL COST ANALYSIS

ANNEX 2: INCREMENTAL COST ANALYSIS

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
Total Project Cost	Baseline	43,473,529	Ongoing initiatives by governments and international agencies and organizations to arrest degradation remain focused on specific sectors, often lacking the "regional LME thinking". Country commitments to improved ocean and coastal governance, including pollution reduction, are not insignificant, being of the order of US $43 billion. Investments by Japan and RO Korea, two countries not eligible for GEF support, represent more than 65% of these baseline costs, whereas China's commitment is about 25%, with the balance coming from ASEAN countries. The emerging foundation for regional cooperation, catalyzed by PEMSEA to address coastal and ocean governance across the region, is stifled with the lack of a regional implementing mechanism. Disparity in the capacities of countries to respond to transboundary environmental threats hampers cooperation among countries. The value of products and services provided by the coastal and marine resources of the Seas of East Asia continues to dissipate with unsustainable use and unrestricted development, which brings about further pollution, habitat loss, and fishery depletion.
	GEF Alternative	43,517,779	The strategic partnership approach brings together all stakeholders to work as complements of each other and to act in a concerted effort to implement the SDS-SEA. The EAS Partnership Council departs from the traditional intergovernmental approach, and operationalizes the sharing of responsibility and resources in meeting the SDS-SEA expectations. The integrated management approach, adhered to as the guiding posts for SDS-SEA implementation, reinforces the attainment of the WSSD POI on the coasts and oceans, UN MDGs, Agenda 21 and Capacity 2015 programs. A core of skilled managers and practitioners is established across the region, with the capability of sustaining and scaling-up integrated management programs in watersheds and coastal and marine areas.
	GEF Increment	44,250	
	(GEF : Co-finance)	(10,876 : 33,374)	
Component A: A functional regional mechanism for SDS-SEA Implementation	Baseline	391,183	Regional bodies and programs continue to function within their respective scopes and mandates, relating to the different aspects of the environment, economic development or social issues. Sustainable development of coastal and marine resources of the region continues to be addressed in a piecemeal fashion. Valuable lessons and good practices in coastal and ocean governance, which are available from country-implemented projects, as well as bilateral and multilateral projects, as well as from outside the region, are

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
			largely unknown or inaccessible to countries.
	GEF Alternative	394,753	Global: A regional mechanism, which brings together the 15 governments of the region as well as the major regional and international stakeholders in coastal and ocean governance, implements the SDS-SEA through partnership arrangements and contributes to a secure global ocean by: reducing common priority threats to national and regional security brought about by competition over limited resources; alleviating the pressures of poverty in the region through conservation and improved management of coastal resources at the community level; increasing the level of resources that will be committed by governments to managing the region's marine and coastal areas, including transboundary issues; and transferring the knowledge, experience, lessons and skills developed and acquired during the program to countries within the region, and to other regions of the world, via a triennial EAS Congress, and linkages with the GEF IW network. A regional State of Coasts reporting system contributes to the regular process of the Global Environment Monitoring and Assessment called for by the WSSD POI. Domestic: PEMSEA countries and partners, through participation in the EAS Partnership Council, assess progress and continually improve a 6-year regional partnership framework programme for SDS-SEA implementation. A sustainable PEMSEA Resource Facility, with the financial support from countries and their partners, provides secretariat and technical services for SDS-SEA implementation. A regional partnership fund operates from voluntary contributions, to reduce disparities in SDS-SEA implementation capacity among countries.
	GEF Increment	3,570	
	(GEF : Co-finance)	(1,462 : 2,108)	
Component B: National policies and reforms for sustainable coastal and ocean governance	Baseline	498,076	After 12 years of PEMSEA and other GEF IW initiatives in the region, there is an appreciation among EAS countries on the need for comprehensive and responsive national coastal and marine policies to govern the management of resources and sectoral activities, in order to avoid conflicting uses of marine and coastal resources. More advanced countries have taken steps to develop and implement cross-sectoral national coastal and ocean policies. However, a significant number of other countries have not started the process due to lack of awareness among policymakers and/or limited capacity to address the issue. Laws and policy issuances remain largely sectoral and fall short of addressing cross-sectoral and multiple-use conflicts. The sectoral orientation relates to the institutional landscape that likewise fails to recognize the interconnectedness of environmental, social and economic concerns.

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
	GEF Alternative	501,722	Global: The development, adoption and testing of methodologies and indicators for assessing social and economic contributions of coastal and marine areas/sectors provides a means for generating awareness and appreciation among policymakers, regionally and globally, for national policies and reforms for sustainable coastal and ocean governance. New policies and policy reforms mainstream the objectives and targets of international conventions and agreements, such as UNCLOS, Agenda 21, and GPA, into strategies and programs at the national and local levels. Domestic: National interagency and multi-sectoral co-ordinating mechanisms facilitate the development of 6-year country programs with time-bound targets for restoration and rehabilitation of habitats and arresting coastal and marine pollution from land and sea-based activities. Increased investments are leveraged from national governments, industry and the private sector in support of agreed targets and initiatives.
	GEF Increment	3,646	
	(GEF, Co-finance)	(624 : 3,022)	
Component C: Scaling up ICM programs	Baseline	801,789	Coastal resource management initiatives continue to evolve as improvements in approaches and capacities are driven primarily by bilateral initiatives. Although some countries have developed and adopted ICM policy and legislation, there is limited capacity to scale up and manage national ICM programs. Several countries in the region recognize the need for interagency coordination. The lack of national policy direction renders interagency coordination limited to ad-hoc arrangements. ICM efforts face resistance from line agencies for fear of losing resources and authority. There is seldom an agency or a ministry with a clear mandate in interagency coordination with respect to coastal and ocean governance. Progress in ICM program implementation across the region is slow, resulting in the continuing degradation and destruction of coastal and marine resources.
	GEF Alternative	817,765	Global: Stakeholders in GEF IW projects benefit from the innovative policies, programs and capacity enhancement techniques applied in the EAS region, in order to scale up ICM from a 'prototype/demonstration phase', to a full-fledged, national strategy and program for managing marine and coastal areas. The formulation and implementation of an ICM Code, for voluntary use as an international standard for certification/recognition of local governments implementing ICM, provides the global community with a means of demonstrating conformance with sustainable development policies, and/or to seek certification of ICM programs as complying with International Standards (e.g., ISO 14001 and/or ISO 9001). Similarly, the PSHEM Code provides the
	GEF Increment	15,976	
	(GEF, Co-finance)	(2,615 : 13,361)	

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
			global maritime and port industry with a means of demonstrating conformance with sustainable development policies, and/or to seek certification of their PSHEMS as complying with International Standards (e.g., ISO 14001, ISO 9001, and OSHAS 18001). Domestic: National policy and institutional reforms, and capacity enhancement/technical assistance programs, target improved local coastal governance and the replication of local ICM efforts. National ICM demonstration sites are influential/supportive in promoting and facilitating local governments to develop ICM programs. National ICM Task Forces, trained in ICM application, provide technical assistance and advice to local governments, thereby facilitating and accelerating ICM coverage of country coastlines, and reversing trends in environmental degradation.
Component D: Twinning arrangements for river basin and coastal area management	Baseline	2,203,511	Ecosystem-based management projects in Bohai Sea, Manila Bay, Gulf of Thailand and Jakarta Bay operate in isolation. They and their partners fail to either capitalize on others' wisdom or to replicate their successful activities. Without access to valuable information and good practices generated by others, these projects continue to re-invent the wheel and do not contribute to global learning to strengthen transboundary waters management.
	GEF Alternative	2,211,639	Global: Through South-South and North-South twinning arrangements, involving both developed and developing programs covering ecosystem-based management of watersheds, estuaries and adjacent coastal areas, project managers and implementers access, adapt and apply one another's' experience and information to effectively leverage GEF and other investments and realize long-term improvements in managing their shared water and marine resources. In addition, the capacity to tap knowledge and information resources assists in sustaining project activities and benefits beyond GEF's intervention. The GEF IW portfolio makes substantial contributions to ecosystem-based management learning regionally, thereby enhancing replication and benefits of GEF IW interventions. Domestic: Responsible national agencies, local government units, private sector and civil society members in Bohai Sea, Manila Bay, Gulf of Thailand and Jakarta Bay adopt and apply successfully-tested approaches to solving problems, while meeting the challenges of ecosystem-based management in selected watersheds and coastal areas, and implementing their respective coastal strategies/ framework programs and formulating investment plans. All entities also establish contacts/networks to which they can go for further
	GEF Increment	8,128	
	(GEF, Co-finance)	(1,303 : 6,825)	

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
			technical advice and assistance regarding such matters. Good practices in ecosystem-based management are evaluated, transferred and replicated.
Component E: Intellectual capital and human resources	Baseline	993,808	Governments, donors, and UN and other international organizations implement numerous country and sub-regional capacity enhancement projects covering areas/issues such as environmental research, development of strategic plans, transferring skills, and building awareness and understanding. While contributing to the overall regional capacity, such projects remain short-term, sector specific and relatively isolated from mainstream management programs. Capacity disparity remains a challenge of governments in SDS-SEA implementation, including ineffective transfer and sharing of knowledge that strengthens management programs. Project managers and stakeholders at different levels must discover and actively seek out intellectual capital within their own country, or within the region, to learn lessons and access technical support and assistance. This results in further reliance on donors and international agencies and organizations to 'provide' the required expertise.
	GEF Alternative	1,003,502	Global: Innovative approaches to mobilization of available intellectual capital for implementation of the regional strategy, through a combination of efforts including PEMSEA Programs for Areas of Excellence, National ICM Task Forces and training programs, country-based learning centers, special skills training programs, post-graduate curriculum in ICM, internships and fellowships, provide the GEF IW program with a package of tested and proven knowledge-sharing products with global application. Linkages between the PEMSEA knowledge center portal and the GEF IW Learn, active participation in the biennial GEF IW Conference, and the organization of a triennial EAS Congress ensure that GEF IW stakeholders learn extensively from one another, and how to improve self-reliance, sustainability and public involvement in coastal and ocean governance matters, including related transboundary issues. Domestic: Decision-making processes within countries benefit from scientific information/advice from universities and other scientific institutions related to, among others, how the marine ecosystems function and how these respond to certain human activities and interventions. A core group of skilled ICM managers and practitioners provides advice and technical assistance to national and local governments in the development and implementation of national ICM programs. Community groups, including women and youth
	GEF Increment	9,694	
	(GEF, Co-finance)	(2,055 : 7,638)	

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
			organizations, participate in local conservation and protection initiatives, providing increased ownership and stewardship for the marine and coastal resources of the region. The PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG) promotes and facilitates ICM replication initiatives among its membership, and advocates ICM program development, implementation and capacity building at the national and international levels.
Component F: Investment and Financing	Baseline	33,759,080	PEMSEA experiences in the Philippines (Batangas Bay and Bataan) demonstrated that the corporate sector is a willing and able partner in the development and implementation of ICM programs. However, this experience does not reflect the prevailing situation in most countries, where difficulties persist in accessing partners and support to develop and implement sustainable marine and coastal resource management programs at the local government level. Related constraints include: the mistrust between the two sectors; misperception of 'partnership' as primarily/solely a financial arrangement between the two sectors; policy, legal and technical barriers to mobilizing necessary financial resources for investment projects at the national and local government levels; limitations in local government access to national financing programs and international investors and private companies; inadequate/inappropriate financing; limited revenue generating opportunities; limited capacity to develop and promote investment opportunities to the private sector.
	GEF Alternative	33,759,832	Global: ICM programs provide a means for the corporate and private sectors to effectively work with hand-in-hand with local governments and other stakeholders to achieve a common objective of sustainable social, environmental and economic development. Through promotion and replication of the approaches used in the Philippines, the concept of corporate social responsibility is transformed into an on-the-ground practice for the GEF IW program. Likewise, based on the experience and good practices derived from the GEF/UNDP MSP on Public-Private Partnerships and the WB/GEF Partnership Investment Fund, policy reforms, innovative financing programs and sustainable financing mechanisms are promoted and replicated as essential tools for scaling up management interventions in IW programs regionally and globally. Domestic: Enabling policies for public private partnerships leverage collaborative activities and participation by the corporate sector in ICM
	GEF Increment	752	
	(GEF, Co-finance)	(432 : 320)	

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
			program development and implementation among local governments in different countries of the region, as appropriate. Investments in the environment sector increase as a consequence of policy and program reforms at the national and local government levels. A number of pollution reduction facilities are put in place, and investment plans for a number of pipeline projects are developed.
Component G: Strategic partnership arrangements	Baseline	4,828,100	UNDP, World Bank, UNEP and other international stakeholders in the region occasionally interact with the countries and each other on marine and coastal governance matters, but there is little focus, strategic outreach, or systematic effort to benefit the efforts of stakeholders across the full scope and objectives of the SDS-SEA. The SDS-SEA implementation program is only partially supported by existing GEF IW funds and individual governments, and there is a disjoint in the priorities and programs of international stakeholders and donors with the overall priorities and strategies of the countries and their commitments to SDS-SEA. The benefits derived from bilateral projects are not seen as collectively contributing to transboundary waters-related issues and sustainable development targets of the region.
	GEF Alternative	4,828,916	Global: A functional and effectively coordinated Strategic Partnership effectively utilizes GEF resources to leverage financial support and investment from other sources, including governments, donors, international organizations, private sector and NGOs, to facilitate/accelerate investments in pollution reduction facilities and services, as part of the regional implementation of the SDS-SEA. The good practices derived from the Strategic Partnership, and the individual projects undertaken within the Partnership, help to mainstream improved pollution reduction programs at the country level, as well as the portfolios of development banks and international agencies and organizations working in the region. The Partners themselves adopt, own, institutionalize, scale-up and replicate successful products and services of the Partnership within the region, as well as in other regions. Domestic: National and sub-national environmental managers and stakeholders are able to access the services of the Partnership and obtain the benefits, as extended and replicated by the Partners beyond the limited scope and duration of this GEF project.
	GEF Increment	816	
	(GEF, Co-finance)	(716 : 100)	
Component H: Corporate Social	Baseline	0	The development of corporate responsibility charters, principles and other instruments by UN and multi-industry bodies (e.g., UN Global Compact; Global Reporting Initiative; OECD Guidelines for Multinational Enterprises; EU Eco-

Component	Cost Type	Cost (US$1,000)	Scenario/Benefits
Responsibility			Management and Audit Scheme (EMAS); ISO 9000 and 14000 series of management standards, as well as the forthcoming ISO 26000 standard) and endorsement of these by a large number of companies and firms across the region provides ample evidence that the private sector is engaged in, and is attempting to respond to pressures for, accountable and transparent corporate responsibility practices, both at the international and domestic levels. While these guides and standards provide practical frameworks for quality management and environmental results, they do not specifically pertain to corporate responsibility for sustainable development, nor are they focused on the specific management issues in coastal and marine areas. This component of the project will build on the foundation of existing and planned guides and standards to come up with a systematic process to evaluate, recognize and replicate the contributions and impacts of corporations exercising exemplary social responsibility in their operations within coastal communities.
	GEF Alternative	739	Global: The experiences of the PEMSEA are disseminated to GEF IW programs in other regions, providing insight into the application of a new model for engaging corporate sector and the business community in sustainable development partnerships with coastal communities. Domestic: 50 companies join forces with local government units to implement ICM and environmental management projects supporting the implementation of sustainable ICM and environmental management projects, which cut across priority issues, including pollution reduction, habitat restoration, water use/ conservation, etc.
	GEF Increment	739	
	(GEF, Co-finance)	739	

ANNEX 3: PROJECT LOGICAL FRAMEWORK

ANNEX 3: PROJECT LOGICAL FRAMEWORK
Implementation of the SDS-SEA
2007-2010

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
Development Objective: Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) through mobilization of the necessary partnership arrangements, operating mechanisms, intellectual capital, support services and resources for the achievement of their shared vision of sustainable use of coastal and marine resources of the region and the development targets of the WSSD Plan of Implementation.	✓ (P) EAS Partnership Council meeting at regular intervals, guiding and coordinating the Regional Framework of Partnership Programmes for SDS-SEA implementation; ✓ (P) Countries committing high-level officers to participate in the EAS Partnership Council; ✓ (P) Plan of action adopted by the EAS Partnership Council, transforming the regional partnership mechanism into a long term, sustainable mechanism for SDS-SEA implementation	✓ quarterly progress reports ✓ annual reports ✓ Tripartite Review assessments ✓ Mid-term and terminal project evaluations	*Risk is minimized due to the following critical assumptions:* ✓ Countries signed the Putrajaya Declaration indicating their willingness to cooperate to achieve the objectives of the SDS-SEA at the national and regional levels; ✓ The current GEF-supported project established working mechanisms, partnership arrangements, trust and confidence among countries and stakeholders to develop and implement the SDS-SEA.
Immediate Objective 1: Implementation of action programs of the SDS-SEA aimed at legal, policy and institutional reforms, and investments, at the local, national and regional levels, with a particular focus on scaling up and sustaining integrated coastal management (ICM) practices to reduce coastal and	✓ (P) Related national policies and institutional mechanisms adopted in place and operational in two countries, initiated in three countries; ✓ (SR) At least 5% of the total coastline of the region initiating or implementing ICM programs;	✓ Same as above ✓ Regional State of Coasts report 2009	✓ Some countries are already developing policies/policy reforms aimed at improving coastal and ocean governance; ✓ National governments will build upon the 8 national demonstration sites established in the previous GEF-supported projects; ✓ Coastal strategies and action plans have been formulated and adopted, focused on sustainable development, with pollution

[10] Process Indicator (P); Stress Reduction Indicator (SR); Environmental and Social Status Indicator (ESSI)

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
marine degradation.	✓ (SR) 3 pollution hotspots with adopted investment plans for pollution reduction facilities and services.		reduction a priority.
Immediate Objective 2: Verification, dissemination and promotion of the replication of lessons and best practices arising from the regional partnership arrangements in collaboration with IW: Learn and other partners.	✓ (P) Agreements signed with at least 2 Areas of Excellence for developing and transferring innovative technologies and approaches in support national and local government with SDS-SEA implementation ✓ (P) 5 country-based National Task Forces assisting national and local governments with the implementation/scaling up of ICM programs ✓ (P) e-learning and knowledge sharing portal transferring lessons and good practices in collaboration with IW-LEARN ✓ (P) PEMSEA network of local governments advocating good practices in ICM	✓ Same as above	✓ A core of intellectual capital, management skills, good practices and innovative technologies is already available within the region; ✓ The disparity in capacity within and among countries can be minimized with the establishment of national training programs, skilled trainers, knowledge sharing networks, and a policy environment for ICM implementation; ✓ A number of local governments in the region are deriving benefits from ICM programs, and serve as working models for others.
Immediate Objective 3: A Strategic Partnership between participating countries, UNDP, the World Bank and other stakeholders to stimulate and co-finance site-specific private and/or public-private land-based pollution	✓ (P) Partnerships between public and private sectors at ICM sites ✓ (P) Policy reforms resulting in increased investments in pollution reduction at ICM	✓ Same as above ✓ Economic development plans of countries ✓ World Bank Country Assistance Strategy	✓ The private sector represents a virtually untapped resource with respect to pollution reduction investment in the region ✓ National governments are interested in engaging the private sector in environmental infrastructure projects

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
reduction investments under the GEF/World Bank Pollution Reduction Investment Fund for the LMEs of East Asia.	sites by public and private sectors ✓ (SR) Project Preparation Revolving Fund operating under an Agreement between GEF, World Bank, UNDP, and the PRF, and facilitating local government and private sector investment in pollution reduction facilities and services		✓ World Bank is committed to the removal of barriers and constraints to environmental investments in the region.
COMPONENT A: A FUNCTIONAL REGIONAL MECHANISM FOR SDS-SEA IMPLEMENTATION			
Outcome 1: An intergovernmental multi-sectoral EAS Partnership Council, coordinating, evaluating and refining the implementation of the SDS-SEA, and advancing the regional partnership arrangement to a higher level.			
Output A.1: A country-owned regional mechanism for SDS-SEA implementation			
A.1.1 6-year framework of partnership programs established	✓ (P) 6-year framework of partnership programs adopted by the EAS Partnership Council	✓ Tripartite Review proceedings ✓ Mid-term and terminal project evaluations ✓ Proceedings of EAS Partnership Council meetings	Assumptions: ✓ The consultation process leading to the development of the regional mechanism has been extensive. Countries are already committed to integration of SDS-SEA objectives and mechanisms into their national programs. Risk: Low
A.1.2 Voluntary regional Partnership Fund developed and operational	✓ (P) Partnership Fund adopted by the EAS Partnership Council	✓ Governing Body rules and regulations ✓ Annual report on Partnership Fund ✓ Proceedings of EAS Partnership Council Fund Manager identified; ✓ Funds deposited with a financial institution.	Assumptions: ✓ To ensure country and donor buy-in, the project will conduct consultations and solicit participation in the needs analysis for such a fund, and any feasibility study concerning the design of the fund. Countries, donor agencies, financial institutions and NGOs will be involved in the process. Risk: Medium ✓ The objectives of the Partnership Fund

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
			may not be understood/appreciated by some collaborators.
A.1.3 Sustainable PRF Secretariat supported by countries and other partners	✓ (P) Cost-Sharing Agreements signed with countries and partners providing funding and in-kind support for the operation of the regional mechanism	✓ Cost-Sharing Agreements	Assumptions: ✓ Three countries that have pledged to support the PRF Secretariat Services for the first three years of operation will honor their commitments. Within that time, the value-added benefits of the PRF will have been established. Risk: Low
A.1.4 Triennial EAS Congress conducted on a continuing basis	✓ (P) EAS Partnership Council decides to sustain the EAS Congress as a triennial event.	✓ EAS Congress proceedings	Assumptions: ✓ EAS Congress in 2003 was considered highly successful; ✓ EAS Congress 2006 has more than doubled interest and support; ✓ The EAS Congress is already recognized by government and non-government sectors as a forum for enhancing their respective objectives. Risk: Low
A.1.5 State of Coasts reporting system in place	✓ (P) EAS Partnership Council adopts the State of Coasts reporting system; ✓ (P) Cambodia, China, Philippines, Thailand, Vietnam, Japan, Singapore, RO Korea, regional organizations and projects, and concerned international agencies and donors complete national and regional SOC reports ✓ (P) Regional State of Coasts report submitted to EAS Congress/Ministerial Forum 2009	✓ National State of Coasts reports ✓ Regional State of Coast report ✓ EAS Congress proceedings	Assumptions: ✓ Several countries in the region have experience in developing status reports on the environment. Thus, the expertise and information are available. ✓ The SOC reporting system is seen by countries and other stakeholders as adding value to current initiatives covering national and regional environmental monitoring and reporting, by providing a common framework and methodology for allowing cross-comparison and integration. Risk: Medium ✓ The variety of ecological, cultural, economic, governing, and social dimensions of the region will make it difficult to define an agreed set of core indicators for regional monitoring and

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
			reporting. However, the Regional Task Force will be asked to identify and group issues into broad categories, and come up with indicators for each category that will "tell the story" about a particular category. The idea will be to start with what is doable and value-added, and strengthen the monitoring and reporting system over time.
Output A.2: A Plan of Action for transforming PEMSEA into a long term, self-sustained regional implementing mechanism for the SDS-SEA			
A.2.1 Benefits and constraints of different operating and administrative arrangements reviewed and discussed among countries, with recommendations to be considered by countries and their partners for transformation to a long term, self-sustained regional implementing mechanism for the SDS-SEA.	✓ (P) Series of seminars/ consultations involving Foreign Affairs, national focal agencies and other stakeholder groups from participating countries	✓ Seminar/consultation meeting reports	Assumptions: ✓ Countries recognize the need and benefits to working together to address sustainable development issues related to coasts and oceans; ✓ The regional partnership mechanism under the UN framework is a first step; the ultimate goal for PEMSEA is a legal regional instrument. Risk: Medium ✓ Some countries may still have doubts about a legal instrument. However, the partnership mechanism is designed to build confidence and trust among the partners regarding SDS-SEA implementation.
A.2.2 Plan of Action for a long term, self-sustained regional mechanism developed	✓ (P) Plan of Action tabled/consensus achieved during regional consultation	✓ Plan of Action	
A.2.3 Plan of Action endorsed to the EAS Partnership Council 2008	✓ (P) Plan of Action adopted and incorporated into the work program of EAS Partnership Council	✓ EAS Partnership Council proceedings	
A.2.4 Plan of Action initiated, including preparation of working documents for the	✓ (P) Drafting of working documents initiated	✓ EAS Partnership Council proceedings ✓ TOR and schedule	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
PEMSEA transformation.		of work approved ✓ Draft working documents	
COMPONENT B: NATIONAL POLICIES AND REFORMS FOR SUSTAINABLE COASTAL AND OCEAN GOVERNANCE			
Outcome 2: National policies and programs on sustainable coastal and ocean development mainstreamed into social and economic development programs of participating countries			
Output B.1: An agreed framework, methodology and indicators for social and economic contributions of coastal and marine areas/sectors developed and demonstrated in two countries of the region.			
B.1.1 An agreed framework, methodology and appropriate indicators for assessing social and economic contributions of coastal and marine areas/sectors within the East Asian region.	✓ (P) Common framework, methodology and indicators adopted and applied by Philippines and RO Korea	✓ Regional Task Force report ✓ Methodology/Guide for Assessing Social and Economic Contributions of Coastal and Marine Areas/Sectors	Assumptions: ✓ Methodologies and indicators can be identified, verified and applied in the assessment of coastal and ocean contribution to overall social and economic development, building on the progress made in the existing efforts to develop the methodology and in collaboration with other partners; ✓ Countries or relevant agencies are willing to share information. Risk: Low
B.1.2 Two (2) national assessments of the social and economic contributions of coastal and marine areas/sectors in participating countries.	✓ (P) Philippines and RO Korea reports prepared/published	✓ National workshop proceedings ✓ Philippines and RO Korea country reports	
B.1.3 One (1) regional forum for senior managers and policy-makers covering social and economic contributions of coastal and marine areas/sectors and promoting policy reforms for strengthening coastal and ocean governance.	✓ (P) Senior managers and policymakers participate in regional forum during the EAS Congress 2009	✓ Proceedings of the Regional Forum on Policy Reforms for Strengthening Coastal and Ocean Governance	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
Output B.2: National policy, legislative and institutional reforms, and interagency and multi-sectoral coordinating mechanisms aimed at improved integrated management of marine and coastal areas.			
B.2.1 Two (2) participating countries develop, adopt and implement, and three (3) countries initiate: a. national SDS-SEA policy and national multi-sectoral and interagency coordinating mechanisms for the implementation of the SDS-SEA; and b. 6-year framework plans for the implementation of the SDS-SEA, including ICM scaling-up programs, strategies, time-bound management targets, priority actions and implementing arrangements for the implementation of SDS-SEA, in consultation with stakeholders.	✓ (P) RO Korea and Vietnam adopt and implement policy reforms for integrated management of coastal and marine areas ✓ (P) China, Philippines and Thailand initiate policy reforms for integrated management of coastal and marine areas ✓ (P) Interagency and multi-sectoral coordinating mechanisms established and operating in RO Korea and Vietnam to coordinate the implementation of the SDS-SEA ✓ (P) 6-year framework plans adopted in RO Korea and Vietnam, with relevant agencies allocating resources and assigning managers and staff to implement work programs	✓ Mid-term Evaluation report ✓ Terminal Evaluation report ✓ 6-year framework plans of RO Korea and Vietnam ✓ national State of Coasts reports of China, Philippines, RO Korea, Thailand, and Vietnam ✓ regional State of Coasts report	Assumptions: ✓ Political will and commitments can be mobilized to address the need for multi-sector and multidisciplinary management mechanisms for national coastal and policy development and implementation; ✓ By signing the Putrajaya Declaration and Haikou Partnership Agreement, governments have already indicated their concern and willingness to strengthen coastal and ocean policies and programs, in accordance with the SDS-SEA implementation. Risk: Low
B.2.2 One (1) regional workshop regarding integrated management of marine and coastal areas.	✓ (P) Policymakers and senior managers participate in the regional workshop	✓ Proceedings of the regional workshop	
COMPONENT C: SCALING UP ICM PROGRAMS			
Outcome 3: Integrated coastal management (ICM) scaled up as an on-the-ground framework for achieving sustainable development of coastal lands and waters in at least 5% of the total coastline of the region by 2010.			
Output C.1: Institutional arrangements for national ICM programs in place			

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
C.1.1 "Leadership Forums on ICM" conducted in five (5) countries.	✓ (P) Senior managers and policymakers participate in national forums in Cambodia, China, Indonesia, Philippines and Vietnam ✓ (P) Plan of action for policy development/reform	✓ Proceedings of Leadership Forums ✓ National Plans of Action	Assumptions: ✓ Policymakers and managers are interested in strengthening coastal and ocean governance Risk: Low
C.1.2 Two (2) participating countries to develop, adopt and implement, and three (3) participating countries to initiate: a) strategies/policies/ legislation for ICM programs; b) 6-year action plans for ICM implementation, with time-bound management targets and implementing arrangements as part of the overall SDS-SEA implementation plan.	✓ (P) ICM policies/legislation and 6-year action plans for ICM implementation adopted and implemented in China and the Philippines, and initiated in Cambodia, Indonesia and Vietnam; ✓ (P) Interagency, multi-sectoral coordinating committees for ICM program established in China and the Philippines, providing planning, direction-setting, decision-making and evaluation for program	✓ ICM policies and strategies ✓ 6-year action plans for ICM implementation ✓ Proceedings of interagency meetings ✓ National ICM programs with targets and timetables	Assumptions: ✓ National governments and stakeholders are committed to develop and implement national ICM policies and programs. ✓ Countries are able to support and leverage funding to sustain the operation of national ICM programs. ✓ Local governments in the region have the capacity to apply the ICM framework and process, with some technical assistance, capacity building and incentives. Risk: Low
C.1.3 Systematic process for monitoring, evaluating and reporting the effectiveness of national and local ICM programs implemented.	✓ (P) Systematic monitoring, evaluation and reporting system for ICM adopted and implemented in Cambodia, China, Indonesia, Philippines and Vietnam ✓ (P) Regional State of Coasts report submitted to EAS Congress/Ministerial Forum 2009 ✓ (SR) 5% of the region's coastline confirmed to be initiating or implementing ICM programs ✓ (ESSI) Increased	✓ Country State of Coasts reports ✓ Regional State of Coast report	Assumptions: ✓ A number of countries in the region already have the capacity for national environmental monitoring and reporting systems. Risk: Medium ✓ Countries may not be willing to share information. However, only those countries willing to share information will be targeted. The idea is to start with a limited number of willing participating countries (5 to 7).

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
	stakeholder participation in coastal governance at the local and country levels ✓ (ESSI) Implementation of strategic action plans within ICM framework in targeted coastal areas result in: reductions in nutrient loadings ranging from 10-50%; 5%-10% of habitats identified as protected areas and/or undergoing restoration; improvements in fishery management and stabilization of some coastal fish stocks and alternate increase in biomass.		
Output C.2: Capacity building strengthened for local government ICM programs			
C.2.1 Existing ICM sites operating as working models and supporting their respective national ICM programs	✓ (P) Coastal strategies adopted and implemented by local governments (Cambodia, China, Indonesia, Philippines, Thailand, Vietnam) ✓ (P) Good practices and case studies documented for replication/use in national scaling up programs	✓ Good practices ✓ Case studies ✓ Socio-economic assessments ✓ Study tour/site visits	Assumptions: ✓ Existing PEMSEA ICM sites have a solid foundation of technical and management skills, and the political commitment to implement their coastal strategies. ✓ The benefits being derived through ICM programs are attractive to other local governments in the country. Risk: Low
C.2.2 ICM learning networks and training programs set up in 3 countries	✓ (P) Learning networks incorporated into national ICM scaling up programs in Indonesia, Philippines and Vietnam ✓ (P) National Task Forces for ICM set up in China, Indonesia, Philippines and Vietnam, and providing	✓ National ICM Scaling up Programs ✓ Training program reports and evaluations ✓ Training certificates issued ✓ National ICM monitoring and	Assumptions: ✓ National ICM demonstration sites serve as good knowledge/training centers in support of national ICM scaling up programs. ✓ PEMSEA's case studies, training modules/materials and other information will provide a sound basis for training programs. ✓ Governments, donors and international

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
	technical assistance to local government units	evaluation reports	agencies and organizations are interested in leveraging local government interest and commitments to ICM ✓ When combined with the awareness building, policy reforms and programs of national governments, the intensive training program is expected to drive national scaling up programs. Risk: Medium ✓ National governments may be reluctant or unwilling to take the lead in the development of national ICM scaling up programs. To reduce the risk, the GEF project will initially focus on countries which are willing to commit time and resources to ICM scaling up.
C.2.3 ICM training manuals, practical guides and case studies, developed in support of training-of-trainers and training of NTF members at the regional and national levels, and training of ICM managers and implementers at the sub-national level.	✓ ICM training manual developed and published ✓ (P) 10 trainers accredited for ICM training ✓ (P) 200 newly trained ICM practitioners engaged in ICM programs	✓ Training certificates issued ✓ Training manuals/programs published	
C.2.4 ICM Good Practices Award developed, recognizing local governments that have displayed commitment and achievement in the implementation of ICM programs.	✓ (P) EAS Partnership Council establishes ICM Awards Committee and Good Practices Award eligibility criteria and operating modality established ✓ (P) Awards presented to local governments	✓ Proceedings of the EAS Partnership Council ✓ Annual report of ICM Awards Committee	Assumptions: ✓ Governments, donors and international agencies and organizations are interested in leveraging local government interest and commitments to ICM. ✓ An award system provides local governments with recognition and incentive. Risk: Medium ✓ The award may not serve as sufficient incentive for local governments to take up ICM and achieve the 5% coverage target. However, when combined with the awareness building, policy reforms and programs of national governments, the award system is to further encourage implementation and competition among sites.
Output C.3: An ICM Code adopted by national and local governments for voluntary use as a standard for certification/recognition of ICM sites			
C.3.1 ICM Code, audit guide and training program	✓ (P) Peer Review Group, comprised of national and	✓ ICM Code, Auditor's Guide and Training	Assumptions: ✓ PEMSEA's experience in ICM development

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
tested/verified	international specialists in ICM, organized to guide and review Code development ✓ (P) PEMSEA ICM Code developed and adopted by the EAS Partnership Council as a standard for voluntary use by national and local governments in ICM program development and implementation.	Manual ✓ EAS Partnership Council proceedings	and implementation in the East Asian region over the past 12 years provides a sound foundation for the development and implementation of an ICM Code; Risk: Low ✓ ICM practitioners may disagree on the core requirements, processes and methodologies for developing and implementing ICM. However, PEMSEA's ICM sites serve as working models of the effectiveness, sustainability and replicability of local government programs in integrated management of coastal and marine areas.
C.3.2 ICM Certification/ Recognition system, adopted and tested in collaboration with national governments, the PNLG, donors, and other concerned stakeholders, as a service of the PEMSEA Resource Facility.	✓ (P) ICM certification/ recognition system tested at 2 ICM sites ✓ (P) ICM Certification/ Recognition service prepared by PRF	✓ ICM recognition certificates ✓ PRF business plan	Assumptions; ✓ National and local governments want an ICM Certification/Recognition System that provides international standards and serves as an incentive for governments to adopt and implement ICM. Risk: Low ✓ Governments may be unwilling to adopt and implement the ICM Code. However, the ICM Code will be an international standard for voluntary use by governments. No government will be obliged to adopt it. The Code and its supporting guides and manuals will aid governments by providing a systematic approach for implementing and sustaining their coastal management programs.
Output C.4: A PSHEM Code adopted and implemented by national governments and the private sector for voluntary use by port authorities and those companies operating in a port as a standard for certification/recognition of a Port Safety, Health and Environmental Management System (PSHEMS)			
C.4.1 PSHEM Code recognized by international agencies,	✓ (P) PSHEM Code adopted for voluntary use as a	✓ Agreements between PEMSEA and	Assumptions: ✓ National governments and concerned

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
authorities and associations with concerns/focus on port development and operations.	standard for measuring and evaluating the effectiveness of PSHEMS in ports by concerned government agencies, international agencies and organizations	national agencies and international agencies/ organizations	international agencies and associations recognize of an international standard for integrated port management. Risk: Low ✓ An International Peer Review Group has already provided input to the Code.
C.4.2 PSHEMS initiated in three (3) ports, building capacity within the region/ports on PSHEMS application.	✓ (P) Training on PSHE-MS implementation cost-shared with port authorities and companies operating in ports	✓ Agreements between PEMSEA and port authorities ✓ Training reports	Assumptions: ✓ PEMSEA's experience in development and testing of the PSHEM Code, including the training materials and capacity building program for establishing a PSHEMS in a port provide a sound foundation for the development and implementation of the project. Risk: Low
C.4.3 PSHEMS Certification/ Recognition system set in place, in collaboration with national governments, private sector, donors, and other concerned stakeholders.	✓ (SR) PSHEMS Certification/Recognition issued to port authorities and companies operating in ports ✓ (SR) Reductions in the number of accidents/ environmental incidents in ports ✓ (SR) PRF providing PSHEM Certification/Recognition service	✓ Applications from Port Authorities/ operating companies for PSHEMS Certification/ Recognition ✓ Annual surveillance reports on Certificate holders	Assumptions: ✓ Port authorities and companies operating in ports want a PSHEMS Certification/ Recognition System that provides international acknowledgment. Risk: Low
COMPONENT D: TWINNING ARRANGEMENTS FOR RIVER BASIN AND COASTAL AREA MANAGEMENT			
Outcome 4: South-south and north-south twinning arrangements established for integrated management of watersheds, estuaries and adjacent coastal seas, promoting knowledge and experience sharing and collaboration for the implementation of management programs in environmental hotspots of the region			
Output D.1: Regional twinning arrangements developed and implemented for site-specific river basin and coastal area management programs			

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
D.1.1 Capacity building and training, staff exchanges, internships/on-the-job training, study tours/site visits, technology transfer, and technical cooperation and assistance.	✓ (P) Twinning and partnership arrangements negotiated and signed between the interested sites, institutions and/or programs for the application of ecosystem management approaches and for the strengthening of marine protected areas	✓ MOAs/MOUs or similar agreements between twinning partners ✓ Annual meetings/ workshop proceedings	Assumptions: ✓ Other regional and extra-regional projects and programs are willing to serve as twinning partners with the selected sites, as a contribution to the implementation of the SDS-SEA and its objectives and targets. Risk: Low
D.1.2 Regional secretariat set up to coordinate and facilitate activities across the sites, including the organization of an annual workshop.	✓ (P) Regional secretariat for the Twinning Arrangements in place in Seoul, RO Korea, and operational, supported by participating governments	✓ Secretariat office staffed by national personnel	Assumptions: ✓ Countries recognize the need for coordination and sharing of experiences from Twinning Arrangements among countries within the region and elsewhere. Risk: Low
D.1.3 Site specific river basins and coastal seas management programs established in: a. Bohai Sea; b. Manila Bay; c. Gulf of Thailand; d. Jakarta Bay; and e. Masan-Chinhae Bay.	✓ (SR) a management program in accordance with the Bohai Sea Sustainable Development Strategy (BS-SDS), focusing on a selected watershed area and addressing water pollution reduction and related financing and investment options ✓ (SR) the Manila Bay Coastal Strategy, covering integrated watershed and coastal area management, the implementation of the Clean Water Act, and focusing on an investment plan for sewage and sanitation facilities and services in the Pasig River-	✓ Operational Plans and budget commitments for identified ecosystem-based management projects ✓ Investment plans submitted to Strategic Partnership ✓ Joint exercises/training program reports among the three countries in the Gulf of Thailand; ✓ Case study/ methodology on the implementation of TPLM.	Assumptions: ✓ Countries support proposed actions that complement existing operational programs in Manila Bay, Bohai Sea and Gulf of Thailand, and help address and overcome existing technical/scientific, institutional, social and financial barriers to programme implementation. ✓ Authorities in Indonesia recognize that the Jakarta Bay project will benefit from the previous PEMSEA experiences in Manila Bay and Bohai Sea. Risk: Medium ✓ The institutional barriers to establishing and implementing an ecosystem-based management program on a basin-wide basis may discourage governments and stakeholders from an integrated management approach. However, in the Bohai Sea, Manila Bay and Gulf of

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
	Laguna de Bay watershed, in collaboration with the World Bank/GEF Manila Third Sewerage Project; ✓ (SR) the Gulf of Thailand Joint Statement/Framework Programme initiated with a sub-regional institutional arrangement development/agreement among the three (3) signatory countries and partnerships forged with industry/private sector for capacity enhancement in oil spill prevention, preparedness and response; ✓ (SR) A river basin-coastal area ecosystem-based management strategy for sustainable development of a watershed area in Jakarta Bay. ✓ (P) Case studies on the experience and lessons gained from the development of a total pollution load management (TPLM) plan for Masan-Chinhae Bay		Thailand, there is already awareness and support among concerned government agencies, levels of government and stakeholder groups for an integrated management strategy and approach to sustainable development of coastal and watershed areas. By strengthening capacities of core personnel and major stakeholders in ecosystem-based management, and building awareness and confidence across sectors, the project will provide a means to addressing major barriers in a transparent and comprehensive manner.
D.1.4 Twinning arrangements expanded to other priority watershed areas/sub-regional pollution hotspots, such as the Mekong River, Red River, and Pearl River.	✓ (P) Agreements on twinning and partnership arrangements negotiated and signed with the interested sites.	✓ MOAs/MOUs or similar agreements between twinning partners ✓ Annual meetings/ workshop proceedings	Assumptions: ✓ Other regional and extra-regional projects and programs are willing to serve as twinning partners with the selected sites, as a contribution to the implementation of the SDS-SEA and its objectives and targets.

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
			Risk: Low
D.1.5 One regional workshop conducted to evaluate the results of the twinning activities, and the potential for replication in other areas.	✓ (P) Regional workshop attended by twinning partners during the EAS Congress 2009 ✓ (P) Replication plan developed and endorsed by the Regional Workshop to the EAS Partnership Council	✓ Proceedings of the Regional Workshop ✓ Replication Plan	Assumptions: ✓ Good practices in ecosystem-based management and innovative approaches to overcoming barriers to investment in environmental infrastructure are recognized as essential elements of sustainable development programs. ✓ Replication plans provide governments and investors with a framework for addressing pollution issues in a rational and affordable manner. Risk: Low
COMPONENT E: INTELLECTUAL CAPACITY AND HUMAN RESOURCES			
Outcome 5: Use of the region's intellectual capital and human resources strengthened, and addressing policy, economic, scientific, technical and social challenges and constraints to integrated management and sustainable use of the marine and coastal environment and resources of the Seas of East Asia			
Output E.1: An enhanced technical support network for countries, comprised of a Regional Task Force (RTF) and country-based National Task Forces (NTF)			
E.1.1 A systematic mechanism for the mobilization of the RTF and NTFs set in place and operational, including appropriate incentive and recognition systems, codes of conduct, and training and evaluation programs.	✓ (P) Agreements signed with RTF members and members of 3 NTFs (Indonesia, Philippines, Vietnam). ✓ (P) RTF/NTF Training programs implemented ✓ (P) System in place for monitoring and evaluating RTF and NTF members, and for recognizing their contributions.	✓ PEMSEA RTF and NTF database ✓ MOAs/MOUs or similar agreements with RTF members ✓ Training workshop reports	Assumptions: ✓ There is a core of existing knowledge and capacity residing in government agencies and institutions and universities, and among various sectors, for sustainable development and management of marine and coastal resources. ✓ Governments, universities and non-government organizations support the strengthening and mobilization of region's intellectual capital and human resources to resolve environmental problems at the local, national and regional levels. Risks: Low ✓ There may be limited interest in establishing/ strengthening RTF and NTF
E.1.2 A core of individuals in participating countries with ICM experience serving as members of NTFs,	✓ (P) ICM technical services provided by NTFs in Indonesia, Philippines and Vietnam	✓ Country reports to EAS Partnership Council	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
focused primarily on the development and implementation of national ICM scaling up programs.			roles and capacities. However, PEMSEA's experience over the past six years has confirmed the support for and value of the RTF approach, both by the recipients of RTF assistance, and by the RTF members themselves. In addition, national consultations undertaken during the PDF-B initiative confirmed national government support for the development and mobilization of NTFs as part of ICM scaling up programs.
E.1.3 Skills and capacities of RTF and NTF members enhanced through training workshops, training of trainers, on-the-job experience, and staff exchanges.	✓ (P) 50 RTF and NTF members trained in policy development, and technical services covering ICM development and implementation, eco-system-based management and State of Coasts reporting	✓ Training reports ✓ Certificates issued to RTF and NTF members ✓ PEMSEA RTF/NTF database	
E.1.4 RTF and NTF members conduct national and regional training workshops, transferring tools and skills for the implementation of SDS-SEA at the local, national and sub-regional levels.	✓ (P) 3 regional training workshops (i.e., methodology for assessing social and economic contributions of coastal and marine areas/sectors; eco-system-based management; and State of Coasts reporting) conducted; ✓ (P) 3 sub-regional training workshops (i.e., oil spill prevention and response; contingency planning and recovery of costs from oil spills; and sensitivity mapping) conducted; and ✓ (P) 10 national training workshops (i.e., ICM policy/program development; national assessment of social and economic contributions of coastal and marine areas/sectors; eco-system	✓ Training modules/programs ✓ Training workshop reports ✓ Training Certificates issued ✓ PEMSEA RTF/NTF database	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
	based management; national State of Coasts reporting; and innovative financing policies and mechanisms for environmental investments) conducted		
Output E.2: Areas of Excellence (AOEs) Program and a regional network of universities/scientific institutions supporting SDS-SEA implementation at the national and local levels			
E.2.1 Partnership agreements negotiated with two (2) internationally and regionally recognized Areas of Excellence to provide scientific and technical inputs to the implementation of SDS-SEA at the national and regional levels	✓ (P) Agreements signed with 2 Areas of Excellence operating within existing research institutions and institutions of higher learning, focusing on: monitoring changes in the marine environment; habitat restoration and rehabilitation; and ocean policy and international conventions.	✓ MOAs/MOUs or similar agreements between AOEs and PRF ✓ Work Programs for AOEs ✓ Technical/scientific reports and/or policy briefs by AOEs ✓ AOE reports to the EAS Partnership Council	Assumptions: ✓ Scientific institutions that are recognized internationally and regionally as Areas or Centers of Excellence are willing to expand their horizons, by sharing knowledge, skills and innovative technologies and approaches across the region; Risk: Low
E.2.2 Linkages with national universities and donors strengthened to augment scientific support to national ICM programs and ecosystem-based management of watersheds and coastal areas.	✓ (P) Agreements signed with national universities, research institutes and donors to augment scientific support and advice in ICM programs at the national and local levels, as well as ecosystem-based management of watersheds and coastal areas.	✓ MOAs/MOUs or similar agreements between institutions and PEMSEA ✓ Country reports to EAS Partnership Council ✓ Case studies/good practices evaluations	Assumptions: ✓ Scientific input is essential to the enhancement of policies and decisions regarding sustainable development of marine and coastal resources. Universities and scientific and technical institutions are willing and capable of providing sound scientific advice to policy-makers and managers. Integrated management approaches provide the opportunity. ✓ Risk: Low
E.2.3 Reporting and information-sharing system developed to disseminate the outputs of the AoE program and	✓ (P) Workshop co-organized by AOEs under the theme, Applying Management-Related Science and Technology to SDS-SEA	✓ EAS Congress proceedings	Assumptions: ✓ The EAS Congress provides AOEs and scientific and technical institutions from the region with an international venue for sharing their knowledge, research results,

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
networking of universities.	implementation, at EAS Congress 2009		experiences and technologies. Risks: Low
Output E.3: Professional upgrade program, graduate scholarships and specialized training courses			
E.3.1 Internships, senior fellowships and specialized training opportunities provided in cooperation with PEMSEA Partners, AoEs, and collaborating institutions and organizations.	✓ (P) Agreements signed with collaborating institutions and organizations ✓ (P) Training modules/ programs prepared, addressing priority needs/capacity disparities ✓ (P) Training schedules promoted, providing capacity development opportunities at national and sub-national levels	✓ Agreements with collaborating institutions and organizations ✓ Training modules, programs and schedules	Assumptions: ✓ Training modules and programs, developed and applied under PEMSEA, can serve as the foundation for enhanced/updated training programs. ✓ There is a demand for internships and fellowships among government agencies and scientific and technical institutions in the region. Risk: Low
E.3.2 Standardization of a post-graduate ICM curriculum promoted amongst participating universities in the region.	✓ (P) Agreements signed with collaborating universities ✓ (P) Post graduate ICM curriculum developed and professional upgrade program established facilitating the process of graduate scholarships, international internships and senior fellowships within and outside the region.	✓ Agreements with collaborating universities ✓ Teaching materials and curriculum ✓ University courses/graduate programs	Assumptions: ✓ Universities in the region are committed to strengthen their ICM postgraduate programs to meet increasing demand for qualified coastal management experts. Risk: Low
E.3.3 Specialized training courses produce the necessary human resources for implementation of the SDS-SEA.	✓ (P) 10 specialized training courses conducted in environmental risk assessment; coastal use zoning; natural resource damage assessment; and IIMS development/ application	✓ Training workshop reports ✓ Training certificates issued to 90 trainees	Assumptions: ✓ Specialized training programs developed under PEMSEA have been tested and proven. There is a demand to extend these trainings. Risk: Low
E.3.4 Effectiveness of professional upgrading, graduate scholarships,	✓ (P) Specialized skills being applied by PEMSEA trainees and graduates in	✓ Survey report	Assumptions: ✓ Governments and institutions are aware that the nomination and selection of

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
and specialized training courses verified.	national and sub-national programs and projects		appropriate candidates for professional upgrading, scholarships and specialized training is critical, in order to ensure that new skills will be applied in support of SDS-SEA implementation. Risk: Low
Output E.4: An internet-based information portal in place, building awareness and transferring knowledge and lessons learned			
E.4.1 PEMSEA's internet portal (www.pemsea.org) operating as an information node of the PEMSEA Regional Programme	✓ (P) Information concerning national ICM scaling up programs and local, national and international partnership arrangements for SDS-SEA implementation shared through portal, in collaboration with GEF IW Learn.	✓ PEMSEA website	Assumptions: ✓ PEMSEA's website has over 2 million hits per year, and is accessible in countries throughout the region. It is already recognized as a primary source of information regarding on-the-ground actions in the region. The learning network can build on that foundation. Risk: Low
E.4.2 Develop and implement information dissemination and knowledge sharing systems using four principal channels:	✓ (P) Agreement signed/ implemented with GEF IW:LEARN, regarding disseminating regional lessons and case studies to International Waters program; ✓ (P) EAS Congress organized, and providing a venue for monitoring, reporting and evaluating progress in SDS-SEA implementation ✓ (P) PRF knowledge-sharing conducted, through training programs, investment projects, and networking arrangements ✓ (P) PRF and country representatives participate	✓ Agreement with GEF IW: Learn Network ✓ EAS Congress proceedings ✓ PRF Secretariat report to EAS Partnership Council ✓ Mid-term and Terminal Evaluation reports ✓ GEF Biennial Conference proceedings	Assumptions: ✓ PEMSEA has already established a working relationship with IW: Learn, and can build upon this partnership. ✓ The EAS Congress is well recognized as a forum for sharing information and knowledge ✓ The PRF is staffed with competent individuals with capacity and experience in training and technical services. Risk: Low

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
	in biennial GEF IW Conference, providing regional experience through case studies and good practices in sustainable development and coastal and ocean governance.		
Output E.5: Community based projects, including those addressing supplementary livelihood opportunities, developed and implemented at ICM sites throughout the region in partnership with GEF/UNDP Small Grants Programme and other community-based donor programs			
E.5.1 Partnerships/working arrangements established with donor-supported programs for SDS-SEA implementation	✓ (P) Agreements signed with GEF Small Grants Programme (SGP) and other community-based donor programs mobilizing community groups/sectors in sustainable livelihood activities in support of sustainable coastal resource management	✓ MOAs/MOUs or similar agreements between SGP, other donor programs and PEMSEA	Assumptions: ✓ One of the important aspects of ICM programs is the engagement of all concerned sectors in managing coastal and marine areas. Such an approach facilitates awareness and interaction between local governments and NGOs, CBOs and POs in the development and implementation of coastal strategies. ✓ International agencies and donors will benefit from the coastal strategies, working arrangements and partnerships that are in place at PEMSEA sites. Risk: Low ✓ Representation and recognition of the role of women, youth, indigenous people and other groups is not considered an important issue in some countries. However, project implementation will focus on countries where the political climate is conducive to community participation.
E.5.2 Projects proposals facilitated, aimed at mobilizing community groups in the implementation of coastal strategies and actions plans.	✓ (SR) At least 6 site-specific and community level collaborative projects developed and implemented to strengthen community participation in decision-making	✓ Project applications ✓ Project reports ✓ Annual reports of SGP	Assumptions: ✓ Coastal strategies already identify social, economic and environmental issues/problems in the local coastal and watershed areas at PEMSEA sites; ✓ NGOs/CBOs and POs are recognized by local governments as partners in coastal

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
	✓ (SR) Increased participation among women, youth, indigenous people and marginalized groups in project activities as a result of an increased knowledge, skills and appreciation of the projects.		strategy implementation. Risk: Low ✓ Local governments/ICM offices will assist NGOs and POs with the development of project proposals
E.5.3 Capacity building activities for community groups implementing projects in support of coastal strategies	✓ (SR) Increased access to training and capacity building within communities at PEMSEA sites ✓ (SR) Increased funding allocation and support for project proposals by women, youth, IPs and other marginalized sectors.	✓ Training workshop reports ✓ Case studies ✓ Annual reports of SGP	Assumptions: ✓ Local ICM offices have the capacity to train/assist NGOs and COs in project development and implementation. ✓ PRF will provide guidelines and training of trainers. Risk: Low
E.5.4 National and regional forums for NGO/community groups organized	✓ (P) EAS Congress and PEMSEA website provide NGOs and CBOs with ready access to good practices and knowledge on community-based resource management and alternative livelihood programs.	✓ EAS Congress proceedings ✓ PEMSEA website ✓ NGO and CBO reports/surveys	Assumptions: ✓ Community-based resource management will be a feature workshop of the EAS Congress. ✓ Donors and international agencies will support the attendance of project personnel (i.e. CBO and PO project implementation team members) to participate in the EAS Congress. Risk: Low
Output E.6: A self-sustaining regional network of local governments in place, operating and committed to achieving tangible improvements in the sustainable use and development of marine and coastal areas through ICM practices			
E.6.1 Capacity enhancing seminars and workshops conducted by PNLG	✓ (P) Senior local government officials participating in seminars and workshops ✓ (SR) 100% increase in the number of local governments participating in PNLG and committed to implementing ICM programs	✓ PNLG membership list ✓ Seminar and workshop reports	Assumptions: ✓ Local governments are willing to sign the PNLG Charter during the EAS Congress 2006, thereby establishing the PNLG. ✓ Local governments are willing to sponsor their own participation at seminars and workshops. Risk: Low ✓ Local governments participated in the

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
			drafting of the PNLG Charter. ✓ Local governments have been cost-sharing meetings and workshops during the ongoing PEMSEA project.
E.6.2 PNLG Secretariat hosted Xiamen Municipal Government	✓ (P) PEMSEA Network of Local Governments established and hosted by the Xiamen, with the members conducting annual meetings.	✓ MOA/MOU between Xiamen Municipal Government and PEMSEA ✓ PNLG meeting reports	Assumption: ✓ Xiamen Municipal Government will volunteer to serve as host for the PNLG Secretariat, and provide resources for its operation. Risk: Low
E.6.3 Regular "World Oceans Week" organized by Xiamen Municipal Government	✓ (P) Local government executives from around the world attended World Oceans Week event and shared knowledge and lessons regarding development and management of urban coastal areas.	✓ Oceans Week report ✓ Xiamen Municipal Government budget allocation for Oceans Week	Assumption: ✓ Xiamen Municipal Government, in collaboration with PEMSEA and UNDP, will organize and co-sponsor the Oceans Week. Risk: Low
COMPONENT F: PUBLIC AND PRIVATE SECTOR INVESTMENT AND FINANCING IN ENVIRONMENTAL INFRASTRUCTURE PROJECTS AND SERVICES			
Outcome 6: Public and private sector cooperation achieving environmental sustainability through the mobilization of investments in pollution reduction facilities and services.			
Output F.1: Innovative national investment and financing policies and programs for public and private sector investment in pollution reduction facilities			
F.1.1 In conjunction with ICM scaling up initiatives (Component C) and river basin and coastal area management projects (Component D), package, promote and facilitate the adoption and implementation of policy reforms, innovative	✓ (P) Good policies and practices in financing and investment in pollution reduction facilities and services packaged and promoted for adoption among ICM sites and pollution hotspots	✓ Policy briefs and case studies ✓ PEMSEA portal and IW Learn dissemination network	Assumptions: ✓ There is an unmet demand for environmental infrastructure projects in the region; ✓ The private sector represents a virtually untapped resource with respect to pollution reduction investment in the region; ✓ Governments are interested and willing to engage the private sector as investors in sewerage, sanitation and waste

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
economic incentives, alternative revenue generating schemes, and appropriate institutional arrangements.			management projects, using traditional and innovative financing mechanisms. Risks: Low to Medium ✓ Governments may unwilling to implement policy reforms to facilitate involvement of the private sector. To address this risk, the project will focus on governments (national and sub-national) that have already expressed/indicated a willingness to engage the private sector as partners in the development and implementation of pollution reduction facilities and services, and/or have similar experience in other sectors. ✓ The private sector may not be interested in working with the EAS Partnership Council and participating countries on this issue. However, it is evident that there is significant investment opportunity in pollution reduction among countries across the region. In many countries there are political, financial and regulatory risks that the private sector is unable to address without the support of national governments. The proposed project provides a window for the private sector to address these risks with governments across the region, while maintaining transparency and integrity of process.
F.1.2 Formulate and demonstrate methodologies for preparing integrated river basin-coastal area management investment plans focused on pollution reduction, for adoption and use by local governments, the private sector, financial institutions and other concerned stakeholders, particularly with respect to the replication and scaling up of innovative technologies and practices (Component G).	✓ (P) Policy reforms developed, adopted and implemented at ICM sites ✓ (SR) Increased investment in pollution reduction facilities and services among ICM sites and pollution hotspots ✓ (SR) Increased jobs/formal employment opportunities created in the environmental industry sector	✓ Policies/legislation/ ordinances ✓ Employment statistics/surveys ✓ Case study/survey of ICM scaling up programs ✓ Case study/survey of pollution hotspot projects ✓ State of Coasts reports	
F.1.3 Establish a one-stop PPP Support Service for local governments, the private sector, financial institutions, and other interested stakeholders, in collaboration with Strategic Partners, to promote and facilitate increased private sector participation in investment projects for pollution reduction at ICM sites and	✓ (P) One-stop public-private partnership support service for local governments and the private sector established and operating within the PRF.	✓ PRF business plan ✓ Requests for PPP services received from governments, financial institutions and private sector	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
in river basin and coastal area management programs.			
COMPONENT G: STRATEGIC PARTNERSHIP ARRANGEMENTS			
Outcome 7: A Strategic Partnership for the Sustainable Development of the Seas of East Asia, functioning as a mechanism for GEF, the World Bank, the UNDP, and other international and regional partners to incorporate and coordinate their strategic action plans, programs and projects under the framework of the SDS-SEA, thus promoting greater sustainability and political commitment to the effort.			
Output G.1: A functional Strategic Partnership arrangement facilitating enhanced communication, knowledge sharing, scaling up and replication of innovative technologies and practices in pollution reduction across the LMEs of East Asia.			
G.1.1 Operationalize a Strategic Partnership Technical Team (SPTT) to coordinate the development, implementation, evaluation and promotion of the collaborative activities and outputs of the Strategic Partnership.	✓ (P) Agreement signed between UNDP, World Bank and the PRF regarding Strategic Partnership arrangement to manage and implement the Project Preparation Revolving Fund	✓ MOA or similar agreement ✓ SPTT meeting proceedings ✓ Mid-term stocktaking meeting report ✓ External evaluation report	Assumptions: ✓ Countries support the Strategic Partnership approach as a means of enhancing cooperation and synergy among projects; ✓ Major international players and regional programs are willing to forge a Strategic Partnership, as a means to improved efficiency and cost-effectiveness of available resources.
G.1.2 Organize and implement a communication/ coordination program for the Strategic Partnership including a website, quarterly reviews/newsletters, regional conferences/workshops, etc. to review the progress and achievements of projects and sub-projects, and to promote the replication of good practices across the region and to other regions.	✓ (P) Communication plan developed/implemented among Partners	✓ Strategic Partnership website ✓ EAS Congress proceedings ✓ National and regional workshop proceedings	Risks: Medium ✓ Countries, international agencies and organizations, private sector and NGOs are not willing to collaborate in all activities and/or prefer bilateral cooperative approaches. To address this risk, national and regional consultations will be conducted during the project to gather input and define the framework of the Strategic Partnership, relative to the needs and benefits of the countries, international agencies and regional programs. ✓ The Strategic Partnership will start with World Bank and UNDP, as a prototype arrangement. As experience and benefits are acquired, the PRF will be responsible for evaluating and communicating the

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
			results/good practices. ✓ By the end of the project, a series of stocktaking meetings and promotional events are expected to generate demand and interest for a long-term partnership arrangement.
G.1.3 Monitor the progress of the Strategic Partnership through agreed indicators for the Partnership, as well as sub-project specific indicators for each sub-project undertaken by the Strategic Partnership.	✓ (P) M&E program conducted by PRF, in collaboration with World Bank, using agreed environmental and socio-economic indicators ✓ (SR) Project Preparation Revolving Fund developed and implemented in one country ✓ (ESSI): Increase in the proportion of population with access to improved sanitation and sewerage systems, with corresponding reductions in risk to incidence of water borne disease.	✓ M&E report to EAS Partnership Council ✓ State of Coasts report ✓ Agreement with one country ✓ Agreements with private sector, donors, and financial institutions	
G.1.4 Package and disseminate multi-media materials regarding the Strategic Partnership and the related sub-projects to governments and stakeholders, the EAS Partnership Council, the EAS Congress, the Ministerial Forum, and other relevant regional and international forums.	✓ (P) Five (5) good practices and case studies prepared by SPTT and disseminated ✓ (P) Workshops and seminars held at the national (5) and regional levels promoting replication of good practices ✓ (P) IT network for promoting replication opportunities set up ✓ (P) Virtual market place for sites and partners wishing to replicate good practices established	✓ Case studies ✓ Good practices ✓ EAS Congress proceedings ✓ Strategic Partnership website ✓ IW Learn network	
G.1.5 Develop linkages and strategic partnership arrangements with regional and international organizations and	✓ (P) Strategic Partnership arrangements signed with two new partners	✓ MOAs or similar agreements	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
institutions, and donors, as well as other regional GEF IW programs, such as the South China Sea, Yellow Sea, Sulu-Sulawesi Seas and the Arafura and Timor Seas, to transfer knowledge, replicate good practices and facilitate increased investments in pollution reduction across the region.			
COMPONENT H: CORPORATE SOCIAL RESPONSIBILITY FOR SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE RESOURCES			
Outcome 8: Multinational and national corporations integrating social responsibility into their organizational strategies, programs and practices, and facilitating the replication and scaling up of capacities in sustainable development of marine and coastal resources among local governments and communities of the region.			
Output H.1: Partnership arrangements established and implemented between multinational and national corporations, industry, local governments and communities for sustainable development of marine and coastal resources.			
H.1.1 Develop multi-media materials and conduct seminars/forums for CEOs and senior managers of corporations (public and private), private industry and local and national government leaders, in order to strengthen awareness and understanding of environmental sustainability, its linkages to economic and social development, and the use of ICM as an effective tool for governance of	✓ (P) CEOs attend seminars/forums to learn about corporate experience in ICM program development and implementation	✓ Reports on CEO forums ✓ APR/PIR	✓ The corporate sector is concerned about its role and responsibility in the community, and is looking for opportunities to demonstrate its corporate social responsibility and impacts, locally, nationally and internationally. ✓ Governments (national and local) are willing and interested to partner with national and multinational corporations, industry and private sector to strengthen governance of coastal and marine resources. Risks: Medium ✓ There is a need to build trust and working relatinships between the two sectors.

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
coastal and marine resources.			PEMSEA has previous experience in this area.
H.1.2 Facilitate the development and implementation of partnership arrangements between corporations/industry and local governments and communities and, within the context of ICM scaling up programs, aligning private sector organizational goals for social responsibility with resource commitments and investments in support of social, economic and environmental goals and benefits of the communities.	✓ (SR) At least 50 companies and firms sign agreements and implement ICM or environmental projects with local government	✓ Signed Agreements ✓ APR/PIR ✓ Technical reports/case studies of partnership arrangements	
H.1.3 Link up with a "corporate champion for sustainable development" to develop and implement a demonstration project on corporate social responsibility in strategic issues/areas of concern to local governments (e.g., water use/conservation; disaster management; sustainable livelihoods; improved access to/usage of IT in knowledge sharing and engaging disadvantaged sectors of	✓ (P) Agreement with corporate champion ✓ (SR) Demonstration project implemented in collaboration with local government and other partners	✓ Signed Agreement ✓ Technical report/case study ✓ APR/PIR	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
communities in coastal governance; etc.).			
Output H.2: Corporate responsibility practices evaluated and recognized as a special relevance to achieving social, environmental and economic benefits in coastal communities.			
H.2.1 Modify and adopt monitoring and evaluation procedures (e.g., ISO 26000), including social, economic and environmental indicators, as appropriate, to assess corporate policy, commitment and actions in aid of sustainable development of coastal communities and their natural resources based on PEMSEA's experience in ICM Code and PSHEMS Code and recognition system.	✓ (P) Methodology developed ✓ (P) Regional workshop conducted, consensus achieved	✓ Methodology published ✓ Workshop proceedings	✓ Corporate sector wants to be recognized for their social responsibility; ✓ The development of corporate responsibility charters, principles and other instruments, and these endorsement of these by a large number of companies and firms across the region verifies this assumption. Risk: Low ✓ PEMSEA has previous experience in developing, demonstrating and implementing recognition systems (PSHEM Code). ✓ This experience will be utilized in developing and implementing the corporate social responsibility recognition system.
H.2.2 Field-test the monitoring and evaluation procedures in collaboration with existing corporate partners who are working with local government units and stakeholders at ICM sites.	✓ (P) Evaluation conducted in collaboration wit corporate sector, at an existing project site	✓ Evaluation report ✓ Refined methodology	
H.2.3 Implement a corporate responsibility recognition system, in collaboration with national governments, private sector, donors, and other	✓ (P) Regional workshop/forum conducted, consensus achieved on recognition system ✓ (P) Recognition system tested/demonstrated at	✓ Regional workshop proceedings ✓ Demonstration report	

Narrative Summary	Indicators[10]	Means of Verification	Assumptions/Risks
concerned stakeholders, to promote and encourage private sector participation, resource commitments and investments in support of social, economic and environmental goals and benefits of coastal communities.	selected sites		

[10]Process Indicator (P); Stress Reduction Indicator (SR); Environmental and Social Status Indicator (ESSI)

ANNEX 4: LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS[11]**
COMPONENT A: A FUNCTIONAL REGIONAL MECHANISM FOR SDS-SEA IMPLEMENTATION		
Outcome 1: An intergovernmental, multi-sectoral EAS Partnership Council, coordinating, evaluating and refining the implementation of the SDS-SEA, and advancing the regional partnership arrangement to a higher level.	**XI. Institutional framework for sustainable development** 160 (b) Facilitate and promote a balanced integration of the economic, social and environmental dimensions of sustainable development into the work of regional, subregional and other bodies, for example, by facilitating and strengthening the exchange of experiences, including national experience, best practices, case studies and partnership experience related to the implementation of Agenda 21; 160 (c) Assist in the mobilization of technical and financial assistance, and facilitate provision of adequate financing for the implementation of regionally and subregionally agreed sustainable development programs and projects; 160 (d) Continue to promote multistakeholder participation and encourage partnerships to support the implementation of Agenda 21 at the regional and subregional levels.	(P) 6-year framework of partnership programs adopted by the EAS Partnership Council (P) Agreements signed with countries and other Partners to provide financial support for sustainable operation of the PEMSEA Resource Facility Secretariat Services (P) A voluntary Partnership Fund for capacity building in support of SDS-SEA implementation among LDCs of the region, adopted by the EAS Partnership Council (P) EAS Partnership Council decides to sustain the EAS Congress/Ministerial Forum as a triennial event to monitor progress and provide direction to SDS-SEA implementation. (P) EAS Partnership Council adopts the State of Coasts reporting system.
COMPONENT B: NATIONAL POLICIES AND REFORMS FOR SUSTAINABLE COASTAL AND OCEAN GOVERNANCE		
Outcome 2: National policies and programs on sustainable coastal and ocean development mainstreamed into social and economic development programs of participating countries	**IV. Protecting and managing the natural resource base of economic and social development** 30 (b) Promote the implementation of Chapter 17 of Agenda 21, which provides the programme of action for achieving the sustainable development of oceans, coastal areas and seas through its programme areas of integrated management and sustainable development of coastal areas, including exclusive economic zones; marine environmental protection; sustainable use and conservation of marine living	(P) Framework, methodology and appropriate indicators for assessing social and economic contributions of coastal and marine areas/sectors adopted and applied in the Philippines and RO Korea. (P) RO Korea and Vietnam adopt and implement national policy reforms for integrated management of

[11] Process (P), Stress Reduction (SR) or Environmental Status (ES) Indicators

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS[11]**
	resources; addressing critical uncertainties for the management of the marine environment and climate change; strengthening international, including regional, cooperation and coordination; and sustainable development of small islands;	coastal and marine areas. China, Philippines and Thailand initiate policy reforms for integrated management of coastal and marine areas (P) Interagency and multi-sectoral coordinating mechanisms established and operating in RO Korea and Vietnam to coordinate the implementation of the SDS-SEA (P) 6-year framework plans for implementation of the SDS-SEA, including time bound targets and priority actions adopted and implemented in RO Korea and Vietnam.
COMPONENT C: SCALING UP ICM PROGRAMS		
Outcome 3: Integrated coastal management (ICM) scaled up as an on-the-ground framework for achieving sustainable development of coastal lands and waters in at least 5% of the total coastline of the region by 2010	**IV. Protecting and managing the natural resource base of economic and social development** 33 (e) Promote integrated, multidisciplinary and multisectoral coastal and ocean management at the national level and encourage and assist coastal States in developing relevant ocean policies and mechanisms on integrated coastal management.	(P) ICM policies/legislation and 6-year action plans for ICM implementation adopted and implemented in China and the Philippines, and initiated in Cambodia, Indonesia and Vietnam (P) Interagency, multi-sectoral coordinating committees for ICM program established in China and the Philippines, providing planning, direction-setting, decision-making and evaluation for program (P) National Task Forces for ICM set up in Indonesia, Philippines and Vietnam, providing technical assistance to local government units (P) ICM Learning Network, including training manuals and support materials, established in collaboration with IW Learn. (P) PEMSEA ICM Code developed and adopted by

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS[11]**
		the EAS Partnership Council as a standard for voluntary use by national and local governments in ICM program development and implementation. (SR) 5% of the region's coastline initiating or implementing ICM programs by 2010 (P) State of Coasts report completed and submitted to the EAS Congress/Ministerial Forum 2009. (ESSI) Implementation of strategic action plans within ICM framework in targeted coastal areas result in: reductions in nutrient loadings ranging from 10-50%; 5%-10% of habitats identified as protected areas and/or undergoing restoration; improvements in fishery management and stabilization of some coastal fish stocks and alternate increase in biomass.
COMPONENT D: TWINNING ARRANGEMENTS FOR ECOSYSTEM-BASED MANAGEMENT		
Outcome 4: South-south and north-south twinning arrangements established for eco-system based management of watersheds, estuaries and adjacent coastal seas, promoting knowledge and experience sharing and collaboration for the implementation of management programs in environmental hotspots of the region	**IV. Protecting and managing the natural resource base of economic and social development** 30 (d) Encourage the application by 2010 of the ecosystem approach. 30 (f) Strengthen regional cooperation and coordination between the relevant organizations and programmes. 32 (c) Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach. 33 (a) Facilitate partnership, scientific research and diffusion of technical knowledge; mobilize domestic, regional and international resources; and promote human and institutional capacity building, paying particular attention to the needs of developing countries.	(P) Twinning and partnership arrangements negotiated and signed between the interested sites, institutions and/or programs for the application of ecosystem management approaches and for the strengthening of marine protected areas (P) Regional secretariat established in Seoul, RO Korea, and regular meetings of partners organized for promoting collaboration and replication of good practices of coastal and marine ecosystem based management programs. (SR) Site specific ecosystem-based management programs adopted and implemented in three pollution

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS[11]**
		hotspots: a) Bohai Sea; b) Manila Bay; c) Gulf of Thailand; d) Jakarta Bay; and e) Masan-Chinhae Bay. including resource commitments. (SR) Investment plans for pollution reduction in two selected watershed areas adopted and implemented by concerned governments.
COMPONENT E: INTELLECTUAL CAPITAL AND HUMAN RESOURCES		
Outcome 5: Use of the region's intellectual capital and human resources strengthened, and addressing policy, economic, scientific, technical and social challenges and constraints to integrated management and sustainable use of the marine and coastal environment and resources of the Seas of East Asia	**X. Means of implementation** 109 (e) Establish partnerships between scientific institutions, public and private institutions, including by integrating the advice of scientists into decision-making bodies to ensure a greater role of science, technology development, and engineering sectors;	(P) Agreements signed with national universities, research institutes and donors to augment scientific support and advice in ICM programs at the national and local levels, as well as ecosystem-based management of watersheds and coastal areas.
	111. Establish regular channels between policy makers and the scientific community to request and receive science and technology advice for the implementation of Agenda 21 and create and strengthen networks for science and education for sustainable development, at all levels, with the aim of sharing knowledge, experience and best practices and building scientific capacities, particularly in developing countries.	(P) PEMSEA Network of Local Governments established and hosted by the Xiamen, with the members conducting annual meetings/capacity development activities and other regular activities agreed by the members.
	112. Use information and communication technologies, where appropriate, as tools to increase the frequency of communication and the sharing of experience and knowledge and to improve the quality of and access to information and communications technology in all countries, building on the work facilitated by the United Nations Information and Communications Technology Task Force and the efforts of other relevant international and regional forums.	(P) System on information and knowledge management developed and implemented through four principal channels, including the PEMSEA internet portal, IW-LEARN, EAS Congress, through the various components of the PRF and internal, regional and national conferences.

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS**[11]
	124. Support the use of education to promote sustainable development, including through urgent actions at all levels to: (b) Promote, as appropriate, affordable and increased access to programmes for students, researchers and engineers from developing countries in the universities and research institutions of developed countries in order to promote the exchange of experience and capacity that will benefit all partners.	(P) Post graduate ICM curriculum developed in collaboration with universities, and professional upgrade program established with Partner organizations, facilitating the process of graduate scholarships, international internships and senior fellowships within and outside the region.
	125. Enhance and accelerate human, institutional and infrastructure capacity -building initiatives and promote partnerships in that regard that respond to the specific needs of developing countries in the context of sustainable development.	(P) A Regional Task Force and five (5) National Task Forces established and fully operational providing training, technical assistance and other related support services to countries in the implementation of SDS-SEA.
	126. Support local, national, subregional and regional initiatives with action to develop, use and adapt knowledge and techniques and to enhance local, national, subregional and regional centres of excellence for education, research and training in order to strengthen the knowledge capacity of developing countries and countries with economies in transition through, inter alia, the mobilization from all sources of adequate financial and other resources, including new and additional resources.	(P) Agreements signed with three Areas of Excellence in the region to provide scientific and technical inputs to implementation of the SDS-SEA at the regional, national and local levels;
	127 (c) Develop the capacity of civil society, including the youth, to participate as appropriate in designing, implementing and reviewing sustainable development policies and strategies at all levels.	(SR) At least 6 site-specific and community level collaborative projects developed and implemented to strengthen community participation in decision-making, livelihood improvement and capacity development.
COMPONENT F: INVESTMENT AND FINANCING		
Outcome 6: Public and private sector cooperation achieving environmental sustainability through	**V. Sustainable development in a globalizing world** 49. Actively promote corporate responsibility and accountability, based on the Rio principles, including through the full development and effective implementation of	(P) Agreements forged between corporate sector and local government units in support of ICM program development and implementation and ecosystem-

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS[11]**
collaborative projects/programs in the development, replication and scaling up of ICM and the mobilization of investments in pollution reduction facilities and services	intergovernmental agreements and measures, international initiatives and public - private partnerships and appropriate national regulations, and support continuous improvement in corporate practices in all countries.	based management of pollution hotspots.
	IV. Protecting and managing the natural resource base of economic and social development 26 (g) Facilitate the establishment of public -private partnerships and other forms of partnership that give priority to the needs of the poor, within stable and transparent national regulatory frameworks provided by Governments, while respecting local conditions 33. Advance implementation of the Global Programme of Action for the Protection of the Marine Environment from Land -based Activities and the Montreal Declaration on the Protection of the Marine Environment from Land –based Activities, with particular emphasis on municipal wastewater, the physical alteration and destruction of habitats, and nutrients, by actions at all levels to: 33 (a) Facilitate partnerships, scientific research and diffusion of technical knowledge; mobilize domestic, regional and international resources; and promote human and institutional capacity building, paying particular attention to the needs of developing countries;	(P) One-stop public-private partnership support service for local governments and the private sector established and operating within the PRF. (P) Good policies and practices in financing and investment in pollution reduction facilities and services packaged and promoted for adoption among ICM sites and pollution hotspots
COMPONENT G: STRATEGIC PARTNERSHIP ARRANGEMENT		
Outcome 7: A Strategic Partnership functioning as a mechanism for GEF, the World Bank, the UNDP, and other	**XI. Institutional framework for sustainable development** 159. Intraregional coordination and cooperation on sustainable development should be improved among the regional commissions, United Nations Funds, programmes and agencies, regional development banks and other	(P) Working arrangements between UNDP, World Bank and the PRF regarding Strategic Partnership coordination of two-GEF supported projects, contributing to pollution reduction through

LINKAGES BETWEEN SDS-SEA IMPLEMENTATION AND THE WSSD PLAN OF IMPLEMENTATION		
SDS-SEA PROJECT OUTCOMES	WSSD PLAN OF IMPLEMENTATION	**SDS-SEA PROJECT INDICATORS[11]**
international and regional partners to mainstream pollution reduction objectives and programs into their regular programs, thus promoting greater sustainability and political commitment to the effort.	regional and subregional institutions and bodies. This should include, as appropriate, support for development, enhancement and implementation of agreed regional sustainable development strategies and action plans, reflecting national and regional priorities.	demonstration and replication of innovative facilities, technologies, processes, practices and services, including performance indicators and targets. (P) Good practices of the Strategic Partnership, and projects within the Partnership disseminated via the EAS Congress, as well as and through the GEF IW Learn network, and other media. (P) Replication process in place, promoting the replication of innovative development of partnerships involving the public and private sector, to leverage investment in pollution reduction good practices.
	III. Changing unsustainable patterns of consumption and production 19 (a) Provide support for the development of sustainable development strategies and programmes, including in decision-making on investment in infrastructure and business development;	(P) Good policies and practices to enhance investments in pollution reduction facilities and services packaged and promoted for replication.
	IV. Protecting and managing the natural resource base of economic and social development 33 (b) Strengthen the capacity of developing countries in the development of their national and regional programmes and mechanisms to mainstream the objectives of the Global Programme of Action and to manage risks and impacts of ocean pollution.	(SR) GEF-supported Project Preparation Revolving Fund set up and operating, through an Agreement between World Bank, UNDP, and PEMSEA, providing local governments and the private sector with access to financing for pollution reduction facilities. (ESSI): Increase in the proportion of population with access to improved sanitation and sewerage systems, with corresponding reductions in risk to incidence of water borne disease.

[10]Process (P), Stress Reduction (SR) or Environmental and Social Status Status (ESSI) Indicators

ANNEX 5: PROJECT MANAGEMENT ORGANIGRAM

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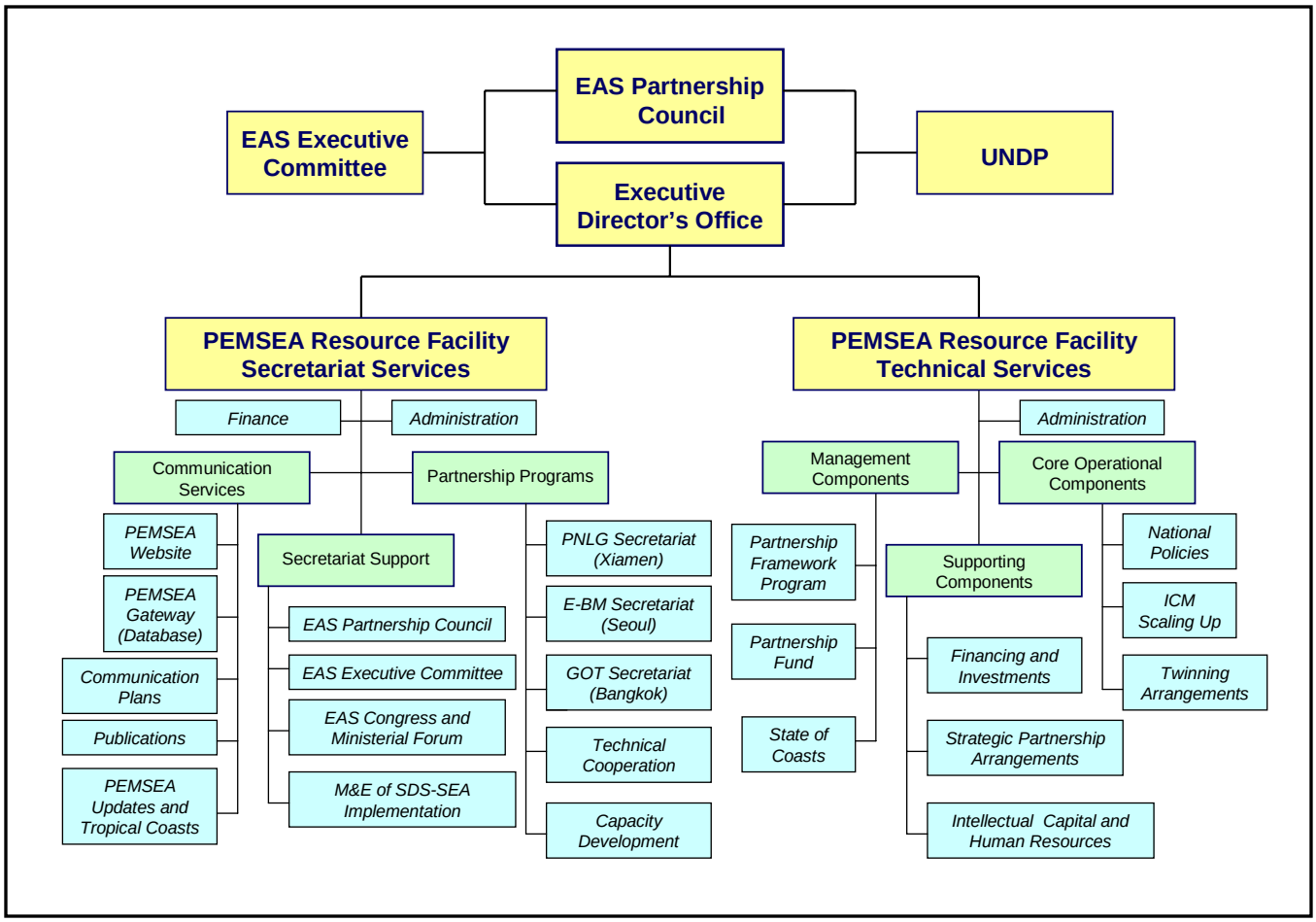

ANNEX 6: STAKEHOLDER INVOLVEMENT PLAN

ANNEX 6: STAKEHOLDER INVOLVEMENT PLAN

A. Background and Objectives

Stakeholder participation in the GEF Project is guided by the overall objective to facilitate the implementation of the Sustainable Development Strategy for the Seas of East Asia in a manner reflective of the shared vision "to safeguard and sustain the resource systems of the Seas of East Asia as a natural heritage for the people of the region, a medium of access to regional and global markets, a source of healthy food supply, livelihood, economic prosperity and harmonious co-existence for present and future generations." The logic of the project is such that interventions and potential benefits will be realized at different levels. The stakeholder processes would generally be the instrument for building a shared commitment to seek collective solutions to the problems affecting the Seas of East Asia.

SDS-SEA stakeholder groups can be categorized according to three levels, namely: local, national and regional levels. ICM implementation and scaling-up programs, as well as community-based resource management initiatives, will engage local level stakeholders including community/people's organizations, local government units, NGOs, religious groups, academe and the private sector, as key partners. National level stakeholders will be instrumental in the formulation, adoption and implementation of national coastal and ocean policies, and in establishing coordinative and collaborative links with different government agencies. At the regional level complementary activities will be explored with UN agencies, international organizations and regional programs, along the areas of, among others: addressing impacts from sea-based human activities; sustainable fisheries and conservation of fish stock; degradation from land-based human activities; environmental monitoring, reporting and information exchange; capacity-building; knowledge-sharing; and innovative financing mechanisms.

The involvement of the stakeholders in the process will essentially be along the nature of "*inform, consult, involve, collaborate, and empower*"[12] and will be defined further according to the components of the project. The Stakeholder Involvement Plan (SIP) thus represents an integral part of the project document that is intended to be referred to on a regular basis and updated, in consultation with the stakeholders, as the project advances. It essentially operationalizes the avowed commitment for the effective participation by a wide range of stakeholders and ensures that these processes are well coordinated, comprehensive and implementable. The integration of stakeholder participation in the Project seeks to be not only as instrumental to the realization of the SDS-SEA, but likewise attempts to be transformative in providing opportunities to strengthen the capacities of coastal communities through access to informed decision-making and harnessing of self-help potentials. The SIP is hence intended to guide the attainment of the aforementioned objectives by outlining the proposed engagement activities based on project components. In more specific terms the SIP serves to:

- ensure that program interventions and processes integrate public participation and stakeholder inputs;
- support systematic mainstreaming and engagement of stakeholders in the process to maximize efficiency and consistency;
- provide a means of defining and targeting specific capacity-building activities that will support effective engagement processes, such as providing access to information and capacity-building;

[12] IAP2.org/practitionertools/spectrum.pdf

- institutionalize a mechanism to solicit inputs and insights and sharing of information; and
- ensure meaningful participation and enlightened involvement in local, national and regional activities.

There are many ways that stakeholders can be involved in the process. The Plan indicates the level of influence and interest by clustering these according to the following: *primary stakeholders* [13] (targeted participants in an activity), *secondary stakeholders* (intermediary participants) and *external stakeholders* (include people and groups not formally involved but who may impact or be affected by the activity). The clustering, which is based on the nature of the earlier engagements of the stakeholders with the PEMSEA as well as their respective evolving roles in the Project, subsequently guides and defines the forms of engagement appropriate for each. The forms of engagement will involve consultation through regular meetings, information, commitment, communication, dissemination, joint planning, implementation, and monitoring and evaluation to exercise social accountability.

The integration of stakeholder participation in the Project seeks to be not only as instrumental to the realization of the SDS-SEA but likewise attempts to be transformative in providing opportunities to strengthen the capacities of coastal communities through access to informed decision-making and harnessing of self-help potentials. The Stakeholder Involvement Plan is hence intended to guide the attainment of the aforementioned objectives by outlining the proposed engagement activities based on project components. In more specific terms the SIP serves to:

1. Ensure that program interventions and processes integrate public participation and stakeholder inputs;
2. Support systematic mainstreaming and engagement of stakeholders in the process to maximize efficiency and consistency;
3. Provide a means of defining and targeting specific capacity-building activities that will support effective engagement processes, such as providing access to information and capacity-building)
4. Institutionalize a mechanism to solicit inputs and insights and sharing of information; and
5. Ensure meaningful participation and enlightened involvement in local, national and regional activities.

The system of governance to be institutionalized within the East Asian Seas Region shall strive for decision-making that is based on a shared goal and therefore a collective responsibility of all sectors of society, thus, highlighting the value of consensus-building, partnership and inclusiveness to give women, poor and other marginalized sectors of society a chance to engage in the development process. It shall also recognize differentiated, owing to disparities in capacities, but joint decision-making through processes that are flexible, participatory, consultative, community-based, multi-stakeholder and proactive ad commitment-based.

B. Stakeholders Involvement for Project Conceptualization and Development

Following the signing of the Putrajaya Declaration in 2003, focused deliberations were undertaken on the proposed *"Implementation of the SDS-SEA"* initiative. The *Tripartite Review Session of the 9th PSC meeting* held in 2003 endorsed the formation of a Working Group that would have the critical task of developing and building consensus on the concrete measures

[13] http:www.undp.org/csopp/paguide3.htm

and steps to implementing the SDS-SEA and building national capacity. In particular, the Working Group was tasked to formulate the *PEMSEA Partnership Agreement* and to undertake activities that would lead to its adoption among PEMSEA countries and stakeholders. The Agreement, which was subsequently endorsed during the *10th PSC Meeting* in October 2004, addressed the mechanisms for implementing the SDS-SEA and sustaining these over the long-term.

In keeping with the approach adopted during the SDS-SEA formulation, the PDF-B supported project design and preparation of the Project Document on "*Implementation of the SDS-SEA*" have also been highly participatory, with government, international community, and community representatives participating in the project preparation as working group members and during the series of workshop/consultations conducted. The process also took advantage of the existing institutional arrangements that have been put in place as part of the PEMSEA's implementation arrangements. These mechanisms range from the more structured Programme Steering Committee meetings to less structured consultation process mainstreamed as part of the implementation of local ICM, and subregional sea pollution hotspot environmental management projects, among others. From February to August 2006, national workshops, consultations and negotiations were carried out in 11 countries of the region, namely Cambodia, China, DPR Korea[14], Indonesia, Japan, Lao PDR, Myanmar, Philippines, RO Korea, Thailand, and Vietnam, essentially to provide the opportunity for countries to reflect on the importance of improved coastal and ocean governance to sustainable development, to identify proposed activities that are national priorities, and to confirm country willingness and commitment to undertake/participate in SDS-SEA implementation. In each case, consultations involved a review of policies, projects and programs related to sustainable development of marine and coastal areas, identification and discussion on barriers and constraints to national program objectives and commitments to international environmental agreements, and delineation of national priorities with regard to the SDS-SEA implementation program. A Project Design for SDS-SEA implementation served as a primary resource document for the national consultations. The outputs of these consultations were then consolidated in the Project Document, including a 10-year transformation program for PEMSEA identifying country commitments and involvement in the transformation process (Annex 7 of the Project Document).

C. Stakeholder Identification and Involvement in Project Implementation

The SIP was prepared through the identification of the stakeholders that have been involved as partners in past PEMSEA activities, including those who played critical roles during the negotiations and consultations undertaken thus far in the development of the next phase. Results of stakeholder identification and involvement are found in attached table. Potential partners and other affected stakeholders have likewise been listed as part of the objective of the project to mobilize greater support for the common cause on the sustainable development of the Seas of East Asia. Stakeholders' role in the process is indicated by ascribing labels and segmenting the stakeholders according to level of involvement in the project, interest, power and influence implying different set of engagement process. These range from primary, secondary and external stakeholders. As a tool in planning for the engagement process such

[14] Effective January 2007, UNDP has suspended operations in DPR Korea. In accordance with the UNDP policy decision, DPR Korea has not been included in this GEF Project Document. However, if and when both the UNDP and GEF decide to lift the moratorium, the SDS-SEA implementation project will re-engage DPR Korea. DPR Korea has been a participating country of PEMSEA over the past 12 years, and is a signatory to the Putrajaya Declaration (2003) and the Haikou Partnership Agreement (2006). DPR Korea is a member of the EAS Partnership Council, and will continue to support SDS/SEA implementation through its own ongoing and planned national initiatives.

labels are meant to guide planning and activity implementation and ensure that these are directed at the intended groups.

D. Knowledge Sharing

In line with the *"COMMUNICATE"* strategy of the SDS-SEA, and to further develop, enhance and utilize intellectual capital accumulated by PEMSEA and others in the region, this Project will target strengthening the use of the region's intellectual capital and human resources to address policy, economic, scientific, technical and social challenges and constraints to integrated management and sustainable use of the marine and coastal environment and resources of the Seas of East Asia (Component E). The participation of regional bodies, governments, civil society and the private sector towards this end, will be mobilized to enhance the exchange of ideas, information and knowledge on understanding issues and processes on coastal and marine as well as the utilization of science and traditional knowledge in decision-making.

The GEF IW Learn project, as a key player in the formulation and implementation of the project, will collaborate with the EAS Partnership Council in the development of a training and knowledge sharing system that helps to bridge the information and knowledge gap, through such initiatives as: web page development and electronic networking, e-learning program development and implementation, meta database formulation and applications, outreach programs for recruiting scientific experts and qualified professionals, brokering exchange of experience and capacity building opportunities between IW projects across regions, and overall application of the Internet to benefit transboundary waters management. This would be particularly supportive for transferring PEMSEA experience in ICM to other GEF projects in other regions, such as the Bay of Bengal, the Pacific SIDS projects, as well as collaborative efforts with the GEF Red Sea project in transferring ICM experience to the Red Sea region.

The internet-based capacity-building will also serve as the virtual "coupling mechanisn" to converge knowledge generated from formal, informal and professional networks that have been and will be created, and provide the "sharing mechanism."

At the regional level, efforts include:

- a PEMSEA portal that would comprise a number of sub-networks to include linkages with the local governments, scientific and technical institutions and organizations, marine affairs institutions, private sector, financial institutions, serving principally to facilitate the sharing of intellectual capital, technology, information and services on the implementation of the SDS-SEA;
- PEMSEA Programmes for Areas of Excellence with internationally and regionally recognized universities and research institutions in the region, to provide expert advice and scientific support to countries and their partners on specific issues of concern to SDS-SEA implementation;
- Regional Task Force and National ICM Task Forces mobilized to provide technical support to national and local governments in program development, project implementation and capacity building; and
- transformation of the PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG) into as self-sustaining local government-driven network as channels of information; and
- a triennial EAS Congress, organized for the primary purpose of knowledge-sharing and transferring experiences and good practices among governments and stakeholders within the region, and with national and regional programs outside of the region.

At the national Level:

- an assessment of the contributions made by the coastal and marine areas/sectors to overall social and economic development at the country and regional levels, with input from scientific, technical and legal organizations and associations, national donors, and international agencies and organizations universities, financial institutions, private sector groups, specialized international NGOs;
- cross-sectoral coordinating mechanisms established within participating countries to facilitate flow of information to cooperating agencies to ensure harmonized and integrated activities and mitigate resource/multiple use conflicts and to provide and guide the monitoring framework for SDS-SEA implementation;
- ICM learning networks developed in three countries, to facilitate knowledge sharing among agencies, institutions, projects and programs at the national level, in order to develop/strengthen ICM training programs and provide on-the-ground capacity development and support services to implement ICM programs; and
- national coordinators identified to ensure transfer/access to information at the national and sub-national levels.

At the local level:

- knowledge sharing programs will function and operate through the PEMSEA portal and the GEF-IW: LEARN Resource Center (IWRC). ICM practices will be consolidated and shared;
- knowledge management mechanisms will also support local governments in the development and issuance of local ordinances to complement national policies that recognize local level dynamics;
- On-site training of local ICM managers, implementers and community participants will be undertaken, and the focus will be to forge partnerships with donors and international agencies and organizations, including the UNDP SGP, to strengthen local capacities and involvement in implementation of sustainable development activities at the local level.

E. Social issues

Degradation of coastal and marine ecosystems in the region has far reaching implications on the human dimension of the Seas of East Asia where over 60 million people are directly supported by it. Emerging social issues associated with the impacts of this current resource degradation trend and which are integrated in the scope of the SDS-SEA include the following:

1. Threats to food security as trends in unsustainable fishing practices and habitat destruction persist, impinging on the ability of the ecosystem to support the marine food production.
2. Economic dislocation and marginalization of people whose livelihood are linked with maintaining the integrity of the ecosystems.
3. Increasing vulnerability to natural hazards brought about by human influence and its interaction with the economic, social and institutional factors that will render coastal areas uninhabitable.
4. Increasing threats to public health of toxins and hazardous compounds in edible marine products and by increased dangerous waste levels in coastal waters.
5. A large number of people are unnecessarily exposed to waterborne diseases arising from inadequate access to safe water and the relatively low coverage of sanitation facilities and lack of proper waste disposal systems for solid and hazardous wastes in several countries within the region.

6. Loss of life and more pollution incidents are likely as greater shipping congestion and other marine activities lead to more maritime accidents.
7. Loss of aesthetic and recreational values
8. Conflicts on resource use and inaccessibility will intensify divergence and lead to social unrest.
9. Attendant transboundary impacts
10. Economic growth especially for resource dependent countries of the region will be seriously undermined.

The improvement in the quality of life of the people of East Asia remains the ultimate goal of the shared vision and mission of the SDS-SEA, where its pursuit will continue to rely on the different stakeholders to work in partnership across boundaries, sectors and organizations. The implementation of the SDS-SEA aims to show the way towards harmonizing actions for that common goal and in the process catalyze interventions on specific areas where action are deemed most critical for the Seas of East Asia. Specifically and to hasten actions to protect vulnerable and marginalized sectors of society within the region the Project will catalyze the following, among others:

- Scaling up on-the-ground integrated management of coastal and watershed areas at the local government/community level across the region, thereby enhancing food, shelter, livelihood/employment, health, environmental and economic security of local populations on a sustainable and self-reliant basis;
- Providing the means and opportunities for women, the youth, the poor and other marginalized groups to develop and implement initiatives aimed at conserving and restoring coastal and marine resources, while enhancing social well-being and livelihoods in coastal communities, in collaboration with the GEF/UNDP Small Grants Programme;
- Enhancement of capacity-building and ensuring access to information to empower the local actors to make decisions concerning the resources on which their livelihood depends;
- Support at the national level through the assessment of contributions made by the coastal and marine areas/sectors to overall social and economic development at the country and regional levels that supports the development of national agenda, policies and programs for sustainable coastal and ocean management and the benefits derived for present and future generations.
- Promote increased private sector investments to reduce pollution and address access to safe water and sanitation.

Mechanisms to be in place will support greater mainstreaming of women, youth, Indigenous peoples and other vulnerable sectors in the environmental and social development processes. These will be undertaken through ensuring involvement of local communities (e.g., people's organisations) in formulation of plans, policies and legislation; participate in participatory monitoring approaches on the status of coastal resources and environmental quality; mobilization in information dissemination; and in the enforcement of local level ordinances governing resource use.

STAKEHOLDER INVOLVEMENT PLAN

Component	Key Stakeholders/Partners	Major Roles	Involvement Strategies and Mechanisms
COMPONENT A: A FUNCTIONAL REGIONAL MECHANISM FOR SDS-SEA IMPLEMENTATION	✓ Countries of the East Asia region, including national and local governments, community groups, NGOs and other members of the civil society; ✓ Research and educational institutions; ✓ Private sector; ✓ UN and international agencies and financial institutions that support or sponsor the implementation of the SDS-SEA; ✓ Concerned regional and global programs; ✓ Other countries using the Seas of East Asia	*Primary stakeholders*: ✓ Participate in the regional collaborative efforts to implement the SDS-SEA and ensure that their individual programs and actions are consistent with the SDS-SEA; ✓ Contribute to the regional endeavor to implement the SDS-SEA and support their respective representatives to attend the EAS Partnership Council meetings, meetings of the regional networks, and EAS Congress within their capacities; ✓ Set up the Regional Partnership Fund	EAS Partnership Council Meetings as a mechanism to inform, consult with, solicit inputs, engage in dialogue, reporting, feedback, and mobilize resources among stakeholders
	✓ The World Bank	*Primary stakeholder*: ✓ Support national policies, programs and practices to establish a stable financial and investment climate, provide policy guidance and technical expertise on an investment fund for land-based pollution reduction	
	✓ UNEP/GPA	*Primary stakeholder:* ✓ Provide guidance on the national and local response programs to manage marine pollution arising from municipal sewage, nutrient discharges, and the physical alteration and destruction of habitats	
	✓ UNDP	*Primary stakeholder:* ✓ Provide direction and leadership role in the development of capacities for the coastal and marine environment management, and facilitate the implementation of the Millennium Development Goals	
	✓ IMO	*Primary stakeholder:* ✓ Provide direction and leadership on the prevention of adverse impacts from sea-based human activities through strengthening awareness and capacities in maritime safety, marine pollution from ships, ship and	

Component	Key Stakeholders/Partners	Major Roles	Involvement Strategies and Mechanisms
		port security, invasive alien species in ballast water, and the designation and management of particularly sensitive sea areas (PSSA's)	
	✓ FAO	*Primary stakeholder:* ✓ Collaborate on the application of ICM for fisheries management to promote equitable and sustainable fisheries and conservation of fish stocks	
	✓ GEF/UNDP Small Grants Programme	*Primary stakeholder:* ✓ Collaborate on building sustainable development and environmental conservation programs at the local level, and support SDS-SEA's local capacity building and community-based activities.	
	✓ ADB	*Primary stakeholder:* ✓ Support national policies, programs and practices to establish a stable financial and investment climate; ✓ Provide technical assistance and capacity building	
	✓ ASEAN ✓ APEC ✓ ESCAP ✓ COBSEA/UNEP Regional Seas Programme ✓ NOWPAP	*Primary stakeholders:* ✓ Coordinate regional and sub-regional mechanisms to combat transboundary environmental threats in regional seas; ✓ Maintain active collaboration and undertake joint initiatives within the respective plans of action of regional bodies.	
	✓ GEF Regional Projects on LMEs (South China Sea, Yellow Sea), as well as in major river basins (Hei, Pearl, and Mekong).	*Primary stakeholders:* ✓ Collaborate on the exchange of knowledge and experience in integrated management of marine and coastal resources at the local and subregional levels, as well as the management of transboundary, cross-border environmental issues, for use in the development and implementation of SAPs and operational programs; ✓ Share information with a wide audience of national, regional and international partners, develop and implement joint or complementary capacity building programs; ✓ Promote investment projects with the private sector; ✓ Participate in the formulation and implementation of a 6-year framework of regional partnership programs.	
	✓ IOC/UNESCOP	*Secondary stakeholder:* ✓ Provide scientific and technical advice on marine environmental monitoring and information sharing towards a systematic approach to environmental	

Component	Key Stakeholders/Partners	Major Roles	Involvement Strategies and Mechanisms
		monitoring, reporting and information exchange	
	✓ UNFCCC	*Secondary stakeholder:* ✓ Provide scientific and technical input on impacts of climate change, especially sea-level rise and local management initiatives to promote ICM as an effective management framework.	
	✓ RAMSAR and Biological Diversity Convention	*Secondary stakeholder:* ✓ Coordinate input on Integrated management of watersheds and coastal areas using ecosystem-based approaches, collaborate on addressing wetland coastal ecosystems and biodiversity	
	✓ UNEP/Basel Convention and the Stockholm Convention (POPs)	*Secondary stakeholder:* ✓ Provide advice on legal and economic instruments and programs regarding toxic chemicals and hazardous waste management at the national and local levels; ✓ Provide technical and policy guidance on management mechanisms for toxic chemicals/hazardous wastes and their transboundary movements	
	✓ World Tourism Organization	*Secondary stakeholder:* ✓ Provide advice on sustainable economic development in coastal and marine areas	
	✓ World Health Organization	*Secondary stakeholder:* ✓ Provide advice on protection of human health and society from risks that occur as a consequence of human activity; ✓ Provide directions and guidance on human health and sanitation.	
COMPONENT B: National Policies and reforms for sustainable coastal and ocean governance	✓ National government agencies and institutions ✓ National coordinating mechanism for national SDS-SEA implementation	*Primary stakeholders:* ✓ Ensure coherence in coastal and ocean policy, institutional reforms, legislation, regulation, enforcement at local and national levels ✓ Provide a home base for integrated management of marine and coastal areas	Regional workshops; National forums; Training; Regular meetings of national coordination mechanism; Policy advocacy and awareness building activities
	✓ NGOs ✓ private sector ✓ civil society groups	*Primary stakeholders:* ✓ Provide inputs and expertise in the formulation and implementation of national policies	
COMPONENT C: Scaling Up ICM Programs	✓ Relevant national government agencies and institutions; ✓ National coordinating mechanism for national	*Primary stakeholders:* ✓ Provide policy, administrative and technical support in the implementation of ICM scaling-up activities	National ICM Leaders Forum; National Coordinating Mechanism; EAS Congress; PNLG Annual Forum

Component	Key Stakeholders/Partners	Major Roles	Involvement Strategies and Mechanisms
	SDS-SEA implementation		
	✓ Local Governments	*Primary stakeholders:* ✓ Set up local ICM policy and coordinating mechanism for implementation	
	✓ Coastal communities, women, youth, poor and marginalized sectors of society	*Primary stakeholders:* ✓ Participate in building capacity to manage the ICM program and activities; ✓ Engage in participatory planning and identify demand driven priorities for UNDP-SGP funding; ✓ Participate in project design and implementation	Regular meetings, public awareness activities, consultations and dialogue
	✓ UNDP-Small Grants Programme	*Primary stakeholders:* ✓ Implement joint and complementary activities (with PRF) aimed at strengthening local capacities in the sustainable use and management of marine and coastal areas at the community level	MOUs; Project Development; Consultation and coordination meetings
	✓ PNLG	*Primary stakeholders:* ✓ Contribute to increasing the awareness of the ICM scaling-up efforts including ICM Code and recognition system; ✓ Promote their acceptance by local governments	PNLG annual forum; Regular communication and consultation
COMPONENT D: TWINNING ARRANGEMENTS FOR RIVER BASIN AND COASTAL AREA MANAGEMENT	✓ National and local authorities and relevant institutions in Bohai Sea, Manila bay, Jakarta Bay, Masan- Chinhae Bay. Details are described below: • *SOA, local authorities and local communities within Bohai Sea;* • *Ministry of Environment, local authorities and local communities within Jakarta Bay;* • *Department of Environment and Natural Resources, Manila Bay Project, local authorities and local communities; and* • *Ministry of Maritime Affairs*	*Primary stakeholders:* • Firm up management programs for each of the hotspots site to address the priority issues identified in the application of ecosystem management, particularly the water pollution reduction	Project Coordinating Committee; Twinning workshops; Local Partnership Forum; IEC activities

Component	Key Stakeholders/Partners	Major Roles	Involvement Strategies and Mechanisms
	and Fisheries; Masan City; Korea Maritime Institute; Korea Ocean Research & Development Institute; National Fisheries Research & Development Institute, Korea Environment Institute, Republic of Korea		
	✓ Scientific and technical institutions; universities	*Secondary stakeholders:* ✓ Serve as scientific and technical support network to support implementation of ecosystem-based activities in participating sites	Twinning secretariat; website operation; workshop organization; information management and dissemination
COMPONENT E: INTELLECTUAL CAPACITY AND HUMAN RESOURCES	✓ Universities and research institutions in the region with internationally and regionally recognized Areas of Excellence programs	*Primary stakeholders:* ✓ Develop technical work programs that will spell out key contributions to program implementation, taking into consideration the needs for SDS-SEA implementation and capabilities of the institutions, and the mechanisms for financing, implementing and sustaining the identified activities/programs. ✓ Focus will be on providing policy support, degree programs, research opportunities, regional training, technical advice, etc.	Training; EAS Congress; Information sharing
	✓ GEF IW LEARN network	*Primary stakeholder:* ✓ Promote knowledge sharing in coastal and ocean governance	Website cross-linkage; EAS Congress
	✓ PNLG	*Primary stakeholder:* ✓ Promote good practices in ICM; facilitate knowledge sharing	PNLG Annual Forum; Information dissemination and sharing through PNLG website
	✓ Coastal Cities in the region as well as outside the region	*Primary stakeholder:* ✓ Participate in the World Ocean Week Xiamen	Annual Forum; Website linakge
COMPONENT F: INVESTMENT AND FINANCING	✓ Local Governments in ICM sites	*Primary stakeholders:* ✓ Develop investment project initiatives in collaboration with private sector	EAS Congress; Local consultation; website information sharing
	✓ Local community, NGOs, people's organizations	*Primary stakeholders:* ✓ Support investments in pollution reduction and prevention; ✓ Willingness to pay for improved environmental services; ✓ Provide inputs to investment options	
COMPONENT G: STRATEGIC PARTNERSHIP	✓ EAS Partnership Council ✓ World Bank ✓ UNDP	*Primary stakeholders:* ✓ Provide input in the development and implementation of investment plans and financing programs for increased	EAS Partnership Council Meetings as a mechanism to inform, solicit inputs, as avenue for dialogue, reporting

Component	Key Stakeholders/Partners	Major Roles	Involvement Strategies and Mechanisms
ARRANGEMENTS		investments in environmental infrastructure; ✓ Work in partnership with national and local governments and local stakeholders to develop, finance and manage environmental services that are accessible and affordable to all sectors.	
COMPONENT H: CORPORATE SOCIAL RESPONSIBILITY	✓ National and local governments ✓ Coastal communities/social groups ✓ National and multinational corporate sector ✓ Industry/private sector	*Primary stakeholders* ✓ Work in partnership to address/overcome strategic social, environmental and/or economic problems facing coastal communities ✓ Develop and adopt shared vision/responsibility to achieve desired targets of the community	National ICM sites and/or river basin and coastal area management program sites; Local government coastal strategies and operational programs provide a platform for cooperation among stakeholders and a framework for participation by the corporate sector and business community; EAS Congress serves the corporate sector by providing an international stage for recognition of their socially responsible actions.

ANNEX 7: REPLICATION STRATEGY

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INTRODUCTION

Replicability is an integral element of the scaling-up thrust of the SDS-SEA implementation project. It is well recognized that the East Asian region presents a substantial challenge to the achievement of the desired levels of replication. The capacity disparities that exist within and among countries, and the lack of effective working relationships among the many donors, international institutions and regional programmes and projects that are operating in the region, have resulted in limited replication between and across such initiatives in the past.

To address these constraints, the project will operationalize an innovative regional arrangement, founded on intergovernmental and multi-sectoral partnerships, which is designed to break down the barriers created by sectoral thinking, and to promote cross-sectoral cooperation and transfer of capacity and knowledge. As a partnership, the regional arrangement will be outcome-oriented, meaning that the various partnerships that are organized within the regional arrangement are formed to achieve specific objectives and targets within the framework of the SDS-SEA strategy. When the respective objective(s) of the Partner(s) has/have been achieved, the partnership either ceases or transforms to address a new objective or target.

Several novel mechanisms and activities will be applied during the project in order to facilitate and expand partner support for SDS-SEA implementation, and the promotion and replication of good practices.

On the 15 December 2006, 11 countries[15] signed the Haikou Partnership Agreement. The Agreement formally established PEMSEA as the regional coordinating mechanism for the implementation of the SDS-SEA, and marked the start of the transformation of PEMSEA from a project-based arrangement to a long-term, self-sustained and effective regional collaborative mechanism with the mandate to pursue the implementation of the SDS-SEA through collaborative, synergistic and responsible actions, while accomplishing the countries individual commitments. The composition of PEMSEA, as per the Haikou Partnership Agreement, includes:

a) the intergovernmental and multi-sectoral EAS Partnership Council[16], to provide policy and operational guidance for, as well as steer, monitor and review the progress of, the SDS-SEA implementation. The Council will meet every 18 months and, as part of its agenda, will review good practices as presented by Partners, and recommend priority areas/issues for replication of identified good practices. These recommendations will be tabled during the intergovernmental session of the Council, for adoption into the work programmes of PEMSEA and the individual countries, as appropriate. Key issues on the

[15] The countries that signed the Haikou Partnership Agreement included: Cambodia, China, DPR Korea, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Timor Leste, and Vietnam.

[16] On 16 December 2006, 12 stakeholder organizations signed the Partnership Operating Arrangements, thus becoming the first group of non-governmental organizations to be formally recognized as members of the EAS Partnership Council. The 12 PEMSEA Partners included: Conservation International Philippines; Coastal Management Center, UNDP/GEF Small Grants Programme; IOC/WESTPAC; Korea Environment Institute; Korea Maritime Institute; Korea Ocean Research and Development Institute; Ocean Policy and Research Foundation; Oil Spill Response and East Asia Response Limited; Plymouth Marine Laboratory; UNEP Global Programme of Action; and the UNDP/GEF Yellow Sea LME Project.

agenda of the Council over the next three years, as committed in the Haikou Partnership Agreement, include:

- developing and implementing national interagency, multisectoral and multidisciplinary mechanisms and processes for facilitating country implementation of SDS-SEA;
- formulating and implementing national policy and policy reforms aimed at sustainable development of coastal and marine resources, including ICM scaling up, in 5 countries;
- preparing a rolling 6-year framework programme of work for the Council;
- producing a State of Coasts report every three years to monitor and evaluate progress, outcomes and impacts of PEMSEA;
- enhancing efforts in coastal and marine water pollution reduction, particularly for achieving time-bound emission targets and sustainable access to safe drinking water and improved sanitation in pollution hotspots; and
- fostering collaboration, cooperation and partnerships between PEMSEA and other relevant regional and international organizations, programmes and initiatives.

b) the triennial EAS Congress, to serve as a vehicle for various stakeholders, partners and collaborators to share knowledge and monitor the progress of SDS-SEA implementation, as well as to identify and forge new value-added partnerships to accelerate the achievement of objectives under the SDS-SEA;

c) the Ministerial Forum, to provide policy directions and commitments for improving and strengthening the implementation of the SDS-SEA;

d) the regional Partnership Fund, to channel and ensure the best use of voluntary contributions from interested countries, donor agencies, institutions and individuals to reduce capacity disparities that impede SDS-SEA implementation; and

e) the PEMSEA Resource Facility (PRF), a package of services and resources mobilized by PEMSEA to facilitate the implementation of the SDS-SEA. The PRF consists of Secretariat Services in support of the EAS Partnership Council, and Technical Services to provide services required by Partners and collaborators. The Secretariat Services will be funded by participating Governments. The Technical Services will be operationalized through the implementation of projects and services funded by donors and other collaborators. The PRF, in collaboration with PEMSEA Partners, will serve as a vehicle for packaging, disseminating and promoting the replication of good practices and lessons learned from the various projects undertaken by Partners (i.e., members of the EAS Partnership Council), as well as donors and collaborators funding projects in the region.

THE APPROACH

A fundamental criterion of the project is to build replicability into each component during the planning stage. This approach requires that three ingredients be incorporated at the project and sub-project levels, namely: capacity assessment; communication; and partnership development.

Capacity assessment refers to both the demand and supply sides of replication. First, a systematic approach is required to identify and assess the priorities and pre-conditions for successful replication, which will vary under different political, governance, institutional and socio-economic characteristics of sites/areas of the region. Second, there is a need to match

interested sites/areas with appropriate, replicable mechanisms, technologies or practices that have been successfully demonstrated/tested under pertinent conditions.

Communication entails awareness building and knowledge sharing. The awareness building aspect of communication will alert stakeholders to the environmental issues, needed changes, and focus of action to make changes occur on the ground. The knowledge sharing aspect is designed to apply and expand knowledge, innovations, good practices and technologies, as demonstrated and tested under the project. This aspect of communication will be implemented with two objectives in mind: a) to promote development and continual improvement of good practices; and b) to leverage support for and investment in the replication of good practices by concerned stakeholders.

Partnership development recognizes that many local governments in the region lack the confidence and capacity to commit to investments in scaling up ICM, much less pollution reduction facilities and services. Replicable innovations will need to be packaged and promoted with this constraint in mind. Opportunities created for government and non-government partners, the identification of interested partners, and the process of promoting and developing partnerships will be incorporated into the operational activities of the project, in order to scale up partnership activities from a local initiative, to national and regional dimensions.

THE GUIDING MECHANISMS

The project covers a wide range of stakeholders, issues, constraints, activities, outputs and outcomes. Activities undertaken within the project are interrelated at several different levels, and will require a concentrated effort to optimize the replication potential.

The following guiding mechanisms will be put in place to develop, implement, and facilitate the coordination and replication initiatives of the project:

a) *Project Replication Team (PRT)*

The project will set up a Project Replication Team, comprised of multi-disciplinary members of the Regional Task Force (RTF), as well as representatives of key regional entities and projects, including the GEF/UNEP South China Sea and the GEF/UNDP Yellow Sea LME projects. The Project Replication Team will be assigned four main activities:

i. to evaluate sites/areas in the region as potential locations for replication and scaling up of good practices and technologies;
ii. to assess the projects, technologies and practices being implemented under the framework of the SDS-SEA to determine their potential for replication;
iii. to gauge the competency of local governments and potential partners for replication activities, including political, socio-economic and governance characteristics, access to financing, creditworthiness, revenue sources, experience, capacities, partnership qualities; and
iv. to provide technical assistance and advice in developing partnership arrangements for the implementation of replicable technologies and practices.

The PRT will be multi-disciplinary. The RTF Experts List is a database of capable and committed technical and scientific professionals within the region, who can be tapped for short- and medium-term assignments. The RTF provides the project with a pool of experts in

all essential disciplines to work on the PRT, particularly as related to pollution reduction technology; environmental management; policy development; legal and regulatory instruments; financial and economic instruments; socio-economic analysis; communication; capacity development; information management; modeling and forecasting; and partnership development.

In addition to the above experts, the PRT will include representation from regional programmes and projects, which are related to the objectives and action programmes identified under the SDS-SEA (e.g., South China Sea and Yellow Sea LME projects). These representatives bring a wealth of information to the table, particularly with respect to the needs, constraints and capacities of different sites and sub-regional areas, along with a working knowledge of the available partnership opportunities. The PRT is designed to benefit its members by providing a platform for cooperation across various projects and programmes in the region, as well as an opportunity for replication of proven, on-the-ground good practices in their respective locales.

The PRT will also provide technical support to the Strategic Partnership in formulating the criteria, conditions and opportunities for replication, as well as rendering support services for the promotion and implementation of the replication process, such as technical assistance and advice to interested local governments and their potential partners. In particular, the PRT will be responsible for analyzing project information in its local context, and transforming that analysis to a regional scale to identify potential matching replication sites. Such analyses will be systematized, utilizing PEMSEA's IIMS Database and Network as primary tools for collation and analysis of information, in combination with site visits/assessments as necessary.

The Terms of Reference for the PRT will be specified at project start-up, in collaboration with the regional representatives on the Team.

b) *PEMSEA Resource Facility Technical Services – Project Replication Unit*

Within the PEMSEA Resource Facility Technical Services, the project will establish a Project Replication Unit (PRU). The PRU will provide various services in support of the PRT and the Strategic Partnership, including:

Administrative

i. organize the regular meetings of the PRT;
ii. maintain/update the RTF Experts List;
iii. access the necessary expert assistance to facilitate replication initiatives, as required by the PRT and the Strategic Partnership;
iv. coordinate the mid-term stocktaking meeting of the Strategic Partnership; and
v. arrange the external evaluation of the Strategic Partnership.

Technical

i. collate and manage information gathered from the sites/areas and the various sub-projects under the two GEF-supported projects, including site profiles, M&E reports, and annual reports prepared by the sub-projects, utilizing PEMSEA's IIMS and Network as the platform for information and communication activities;

ii. gather information on ICM scaling up programmes and sites, twinning sites/locations, and local and sub-regional project sites/areas of Partner organizations, in collaboration with project managers and coordinators, utilizing electronic linkages to PEMSEA's IIMS and Network;
iii. develop the IIMS software and Network as a platform and communication tool for "matching" good practices and technologies with potential opportunities for replication across projects and programmes of Partner organizations;
iv. implement a communication programme in coordination with the UNDP and The World Bank regarding the Strategic Partnership initiatives, including a Strategic Partnership website, quarterly reviews/newsletters, and annual reports to review the progress and achievements of the projects, to share information and knowledge about good practices across the region and to other regions, and to promote the replication process;
v. monitor and report on stress reduction measures at the local level;
vi. prepare case studies, policy briefs, socio-economic assessments, and other technical reports on replication projects, to verify and improve approaches and methodologies used, and to evaluate and document the impact on society, the economy and the environment, for dissemination to stakeholders;
vii. conduct regional and national replication meetings, in association with the EAS Partnership Council, the EAS Congress, the PNLG, or other regional and national forums where appropriate, to facilitate awareness and participation of national and local governments, financial institutions, donors, the private sector, and community groups (including the poor), in a comprehensive assessment of the sub-projects, including the outcomes and their potential for replication.

Partnership Development

i. package, disseminate and promote good practices and lessons learned from the various projects undertaken by Partners (i.e., members of the EAS Partnership Council and the Strategic Partnership), as well as donors and collaborators funding projects in the region, covering innovative approaches to financing and investment of pollution reduction facilities, socially-sensitive economic instruments and policy reform packages for local governments, and project preparation procedures for strengthening access investors by among local governments and small and medium-sized enterprises;
ii. utilize PEMSEA's Virtual Center for Environmental Investments, which was developed under the GEF/UNDP Medium-Sized Project on PPP, as a medium for disseminating and promoting replication opportunities and strengthening PEMSEA's network of private sector investors, financiers and donors for public-private partnerships (PPP);
iii. co-organize regional and national seminars and workshops for local and national government leaders, private industry and the corporate sector, promoting ICM scaling up programmes and replication opportunities for pollution reduction and environmental conservation and management;
iv. facilitate public-private partnership arrangements involving corporate champions and local governments through ICM scaling up programmes and the PNLG, to demonstrate corporate social responsibility with on-the-ground social, economic and environmental changes in communities;
v. establish linkages with partnership promoting networks within and outside of the region to exchange information, experience and opportunities in replication of good practices through partnerships (e.g., World Bank Group; World Water Council; Water Aid; Global Compact);

vi. set up a one-stop PPP support service for local governments and the private sector within the PRF. The support service is designed to assist local governments with the production of fully-prepared projects for submission to investors and banks for financial support. The PPP support service will serve as an intermediary between the project proponent and the financier, providing a value-added service in reducing the transaction costs of financial partners. The PPP support service will be implemented on a cost recovery basis, as a component of the Project Preparation Revolving Fund, which is currently under development within the Investment Component of the Strategic Partnership.

The Project Replication Unit will consist of a PRU coordinator, information management/communication specialist, and a partnership building specialist. Other expertise will be contracted on a short-term basis as required, utilizing the Regional Task Force resource base.

The Strategic Partnership: Replication of Good Practices in Pollution Reduction

The Strategic Partnership between GEF, World Bank, UNDP and PEMSEA is focused on accelerating investments in pollution reduction, by removing policy, technical, financial and social barriers, and promoting the replication of good practices in pollution reduction within and among countries of the region. It is a partnership arrangement within the broader PEMSEA regional mechanism, in which the partners assume individual and collective responsibilities for accelerating on-the-ground improvements in pollution reduction in the region.

The Partners' Roles

Strategically, the Regional Component of the Strategic Partnership arrangement is responsible for facilitating the replication of good practices in pollution reduction by: enhancing public awareness, understanding and participation in pollution reduction initiatives at the local level; strengthening information and knowledge bases particularly at the local and sub-regional levels; networking among local governments, communities, NGOs and the private sector; developing capacity among stakeholders to create the climate for investment in, and replication of, innovative pollution reduction technologies, facilities and services; evaluating identified good practices and delineating the opportunities for replication; and informing and promoting good practices in pollution reduction through the aforementioned regional implementing mechanisms and support services.

The Investment Component of the Strategic Partnership is aimed at: developing and demonstrating innovative policies, practices, technologies and services to overcome identified barriers and constraints to pollution reduction investments by the public and private sectors; documenting the results of the demonstrated good practices; identifying replication opportunities within the area or country where the demonstration occurred; and disseminating the results of the demonstration projects to national, regional and global stakeholders.

The EAS Partnership Council

As Strategic Partners, the GEF, World Bank and UNDP will be invited to participate in the EAS Partnership Council to share their experiences, knowledge and views on the activities and outcomes of the Strategic Partnership, as well as to dialogue with other PEMSEA

Partners regarding policies and programmes within the region, which impact on larger issues relevant to SDS-SEA implementation. The EAS Partnership Council provides the Strategic Partners with direct access to National Focal Agencies responsible for coordinating and implementing SDS-SEA at the country level, thereby affording the Strategic Partners the following opportunities to promote replication and/or scaling up of demonstrated good practices:

i. development of national policy, legal and institutional reforms to reduce land-based sources of pollutants consistent with the SDS-SEA and the 6-year framework programme of work, scheduled for development and adoption by the Council;

ii. establishment of time-bound pollution reduction targets in designated pollution hotspots/dead zones in coastal areas of the participating countries;

iii. identification and promotion of innovative demonstration projects and financing options in the municipal, agricultural and industry sectors, and in wetland restoration/constructed wetlands to reduce pollution;

iv. engagement of non-government PEMSEA Partners, including the business community, in identifying and demonstration solutions to country and sub-regional problems in pollution reduction;

v. formulation of national replication strategies in partnership with country Partners requesting technical assistance and support for pollution reduction;

vi. preparation of an agreed region-wide monitoring and reporting system (i.e. State of Coasts reporting), based on a suite of performance indicators, including stress reduction indicators for pollution hotspots/dead zones, for use in evaluating the overall social, economic and environmental benefits of SDS-SEA implementation;

vii. co-organization of the EAS Congress 2009, including the conduct of a thematic workshop dedicated to the outputs and outcomes of demonstration projects dealing with pollution reduction, as well as the identification and promotion of replication and scaling up opportunities among sectors, levels of government and national, regional and global collaborators and partners;

viii. introduction of information briefs on innovative policies and institutional reforms focused on pollution reduction to the Ministerial Forum, along with recommendations for implementing such innovative approaches; and

ix. access to the networks and services of the PEMSEA Resource Facility (PRF), including the aforementioned Project Replication Team of the Regional Component and the Project Replication Unit of the PRF Technical Services.

The Strategic Partnership Technical Team

To coordinate the Strategic Partnership activities, a joint technical team (i.e., Strategic Partnership Technical Team or SPTT) will be organized comprised of representatives of the World Bank's Fund Management Team, UNDP and the Technical Services of the PEMSEA Resource Facility (PRF). The SPTT will be set up to develop, guide and monitor the following:

i. communication and awareness building amongst key partners and stakeholders and the wider community regarding the development and demonstration of innovative projects under the Investment Component;

ii. information and knowledge sharing among the Partners, as well as across to other stakeholders, regarding the pollution reduction demonstrations and the replication opportunities;

iii. assessment of results achieved and lessons learned from the demonstration projects;

iv. promotion of good practices and useful lessons for replication within the region, as well as outside the region; and

v. partnership building for the purpose of expanding the Strategic Partnership and for promoting the replication of good practices in pollution reduction, including engagement of regional programs and projects, such as the South China Sea and Yellow Sea LME projects.

Discerning conditions to be used in judging the replication potential of a sub-project will be developed and implemented by the SPTT, including, for example: the social, economic and environmental consequences of the identified constraints or barriers; political, governance, institutional and socio-economic characteristics; required levels of financing; sources of financing; required levels of income/operating revenue; opportunities created for government and non-government partners; and the benefits to be derived by the local communities, especially the poor. This will ensure that replication is not only integrated into each individual sub-project, but is an integral part of the Strategic Partnership and its contribution to SDS-SEA implementation.

The replication strategy of the Strategic Partnership will be implemented by the SPTT, and will consist of two major elements, namely: a) replication or scaling up of good practices within the immediate area of the Partnership Investment Fund demonstration project in order to achieve the full benefit of the forecast reduction in pollution loadings; and b) replication of good practices at the national and regional levels, where opportunities for application of demonstrated technologies and practices have been identified and can be facilitated.

The SPTT strategy will foster the replication of each demonstrated technology or practice under the Partnership Investment Fund project, through information and knowledge sharing activities, national workshops, and regional conferences. Specific actions include:

a. an annual replication workshop conducted in coincidence with meetings of the EAS Partnership Council and/or the PEMSEA Network of Local Government;
b. participation of at least one country official to attend the GEF International Waters Portfolio Conference in 2009 as well as funding for an exhibit at the conference;
c. GEF websites set up for the Strategic Partnership and for each demonstration project; and
d. a series of opportunity briefs published and disseminated on the good practices and replication opportunities. Project websites will be consistent with the IW LEARN guidelines.

The SPTT will meet every six months, or more frequently if required, to review the development, implementation and outcomes of their complementary and joint initiatives. The terms of reference for the SPTT will developed and adopted by the two projects.

CATALYZING THE REPLICATION PROCESS

Catalytic elements of replication that have been imbedded into the SDS-SEA implementation project are as follows:

Project replicability - As a global hotspot, the environmental challenges in the East Asian Seas have great relevance to other regional seas. Therefore, the knowledge and experience on integrated coastal and ocean management, risk assessment and management of pollution hotspots, private sector involvement, coastal policy reforms, coastal zoning and permit systems, economic valuation of natural resources, integrated implementation of international environmental instruments, etc., which that are being acquired in East Asia, are valuable assets to be shared with and transferred to other regions of the world. In cooperation with IW:LEARN, the project will facilitate collaboration and knowledge sharing through electronic networking and by organizing cross-regional activities such as: internships and fellowships, study tours and leadership workshops for practitioners, managers and senior level policy-makers, joint training and capacity building programmes, and technical support and assistance through South-South and North-South cooperative arrangements.

Replicability of the SDS-SEA implementation mechanism – The SDS-SEA is the culmination of a decade worth of analysis, consultation, capacity development, collaboration and planning. The rationale that it provides and the objectives and 'action programs' that it outlines impart an action framework for coastal and ocean management in the region. The "non-convention, partnership mechanism" (i.e., as adopted in the Haikou Partnership Agreement) that the countries have opted for is innovative, and may be more effective than a regional convention in situations where the specific factors contributing to sustainability issues are not clear or the costs or effectiveness of various interventions are uncertain. The partnership approach has the potential of creating opportunities for mutual 'learning by doing', and countries helping countries. Clear targets and timetables will be established by consensus. Decisions are not binding but, because they will be reached on the basis of consensus, and decision-making is a participatory process, the outcome tends to be of a morally binding nature. Collaboration over time will create mutual expectations and motivation to fulfill commitments. The SDS-SEA implementation mechanism will be documented and reported to other regions and sub-regions to support their developmental, decision-making processes.

Replicability of best practices – The project will document case studies, best practices, lessons learned and guidance documents on the implementation of the SDS-SEA at the local, national and regional levels, and promote the transfer of knowledge through the EAS Congress, national and regional workshops and forums, GEF's IW:LEARN, scientific and technical networks, Areas of Excellence, Regional and National Task Forces, a PEMSEA internet portal, linkages with UN, international and regional institutions, agencies and organizations and international NGOs, training and education programs, and internships and fellowships.

Many of the tools, skills and networks that will be at the core of the replication process of the project have been developed during the current GEF-supported PEMSEA project. These

tools and skills will help to accelerate the implementation of the replication strategy, and result in early opportunities and benefits to the Strategic Partnership.

ANNEX 8: SITUATIONAL ANALYSIS OF LME'S IN THE EAST ASIAN REGION

ANNEX 8: SITUATIONAL ANALYSIS ON EAST ASIA'S LMES

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
Context and Global Significance:					
Biodiversity	<u>Yellow Sea</u> • Endowed with high species diversity • Home to approximately 1,600 species from the marine and coastal habitats of the Korean side of the region which include 70 species of phytoplankton, 300 benthic diatoms, 300 marine algae, 50 halophytes, 500 marine invertebrates, 150 fishes, 230 water birds and 10 marine mammals. <u>Bohai Sea</u> • An important stopover location and breeding sites for water birds. It is estimated that at least 800,000 water birds use the 4,800 km2 coastal wetlands, including at least 15 IUCN Red Data species. • More than 265 bird species have been recorded with total numbers estimated at more than 10 million.	• One of the largest marginal seas in the world, which receives tremendous inflow of freshwater and terrestrial sediments, mainly from mainland China and Yangtze River. • One of the most productive in the NW Pacific Ocean and supports a rich diversity of marine flora and fauna. Species of phytoplankton, zooplankton, fishes, mollusks, polychaetes and crustaceans have been identified in the Yangtze River estuary, Zhoushan archipelago waters and the Kuroshio current.	<u>South China Sea</u> • Lies within the global centre of biodiversity for marine species, supports some of most diverse seagrass beds and mangrove forests, 2,500 species of marine fishes and 500 species of reef building corals. <u>Gulf of Thailand</u> • Several types of coastal habitats are found in the GOT including rocky shore, sandy beach, mudflat, mangroves, seagrasses and coral communities.	• Possesses exceptional biodiversity of marine flora and fauna believed to be the result of its geographical and geologic history as a "melting pot of a number of biogeographic provinces" , Similarly situated within the global centre of biodiversity for marine species, supporting for example more than 500 species of reef-building corals, 2 500 species of marine fishes, 47 species of mangroves and 13 species of seagrasses. • Mangrove forests cover an estimated area between 2.49 – 4.25 million hectares representing more than 67% of the total area of mangroves in Southeast Asia. • Supports population of 6 species of sea turtles and some 29 species of marine mammals.	• Lies within the global center of biodiversity for both terrestrial and marine species. It forms part of the "coral triangle" of highest coral diversity with Indonesia and New Guinea with more than 500 reef-building species and 2,500 species of marine fishes. • All major reef types occur, including the Tubbataha reefs, with total estimated reef area of more than 20,000 km^2. • Supports around 400 species of algae, 5 species of sea turtles and 22 species of marine mammals.
Fisheries	<u>Yellow Sea</u> • A significant global	• About 730 fish species have been identified on	<u>South China Sea</u> • Ranks 4th among the	• Contribution of the fisheries sector to the	• A total of 60 to 70 percent of animal protein

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	resource for coastal and off shore fisheries with well-developed multi-species that supported fairly stable fishstock. • 280 species of fish make up the main living resource • Heavy fishing in the mid-60s greatly altered the composition, that in recent years fish catch-per-unit-square kilometer has been reduced to only 2.3 tonnes. • About 100 species of fish including crustaceans and cephalopods are commercially harvested • The abundance of most species is relatively small with only 23 species exceeding 10 000 tonnes in annual catch but accounts for 40 to 60 % of the annual catch. <u>Bohai Sea</u> • Known as a natural fishing ground and harbors over 1,540 species including 29 species of prokaryotes, 653 species of protists, 57 species of fungi, 96 species of plants and	the East China Sea shelf, along with 91 species of shrimps and crabs and 64 species of cephalopods. • Approximately 95 of the total freshwater fisheries products are accounted for by freshwater aquaculture. • Of the four groups of fishes living in the East China Sea, 61 % are tropical fishes. • Fish catch in East China in 2000 amounted to 3.8 million tonnes	world's 19 fishing zones in terms of total annual marine production (equivalent to 7 million tones of fishery resources; 5 M tones of catch per year (10% of total global catch in 1992) • Five of the littoral nations are among the top eight shrimp producers globally, mostly through aquaculture. • The reefs provide nursery and breeding ground for 12 percent of the world's total fish catch; contributing some 30 % of East Malaysia's total catch and 25% in the Philippines; based on their value in food security reefs in Southeast Asia are estimated to be worth more than 2.4 billion USD per year. The reefs in Indonesia provide an annual economic benefit of USD 1.6 billion in 2002. <u>Gulf of Thailand</u> • Fisheries around GOT are multi-gear, multi-species fisheries mostly conducted by small-scale fishermen	national GDP is estimated at 2 %. A significant portion of the total catch is however illegal and unreported. • Fisheries production, notably through aquaculture, mariculture, reef fishing, has increased to meet domestic and international consumption. • Directly supports 16.5 million fishermen that are directly dependent on the sea as their primary source of both food and income.	are derived by the Philippines, Indonesia and Malaysia from marine fishes. • The marine fishery of the region contributes significantly to the economies of Indonesia and the Philippines, and to a lesser extent to Malaysia. • Mariculture, notably of shrimps and to a lesser extent reef fish and lobster, in the three countries have flourished supplying local demands and the live fish trade to Hong Kong, China and Japan.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	705 species of animals • Has over 100 species of major fishes • The littoral area provides favorable condition for mariculture and stock enhancement. In 1999, Bohai sea had a mariculture area of 394,450 ha with a total yield of 1.96 million tonnes.		estimated at more than 4 million. • Major fishery resources are categorized into 4 major groups: demersal fishes, coastal pelagic fishes, shrimps and cephalopods • Trawl is the major fishing gear type in Thailand accounting for 56% of total fishing gears used while purse seine (32%) is also popular for harvesting pelagic resources.		
Population	<u>Yellow Sea</u> • Estimated at 110 million, with the region hosting the following large cities with 1 million or more inhabitants: Qingdao, Tianjin, Dalian, Seoul/Inchon, and Pyongyang/ Nampo. <u>Bohai Sea</u> • Has a total population of about 343.5 million.	• Approximately 1,729 million (GIWA Assessment noted data gaps on demographics and economic sectors)	• Estimates of total population in the region stands at 350 million with some 250 million living in coastal areas. The region also supports large urban centres that include Manila (Philippines), HongKong/Macao (China), Hanoi, Haiphong and Ho Chi Minh cities (Vietnam), Bangkok (Thailand), Kuala Lumpur (Malaysia), Singapore and Brunei	• UN (2002) estimates a total population of 230 million in Indonesia as a whole, with most (200 million) residing in the GIWA region Indonesian Seas, and some 140 million living within 60 km of the coast.	• Current estimates at 34 million, (approximately 25 million Filipinos, less than 2 million Malaysians in Sabah and 7 million Indonesians in East Kalimantan and North Sulawesi), that is predicted to increase to 50 million in 2020 due to increasing pressures of urbanization, industrialization, etc.
Security			• The economic, political and environmental importance of South China Sea makes it one of the most		

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
			contentious areas in the world in relation to international waters. • The significant territorial disputes among neighboring countries related to access to its resources as well as transboundary impacts continue to be an unresolved conflict, heightening tension and inhibiting regional environmental cooperation.		
Economic	<u>Yellow Sea</u> • Fisheries contribution to total national production value in China in 1995 registered 33% or $ 9 billion <u>Bohai Sea</u>. • Currently the engine of economic development in North China and has the third largest economic growth following the Pearl and Yangtze river deltas. Economic sectors include fisheries and mariculture, salt making, port development and marine transport, oil exploitation, tourism, mineral resources exploitation, agriculture	• China's coastal cities and provinces (Shanghai, Zhejiang, Jiangsu, and Fujian) posted rapid increases in GDP . • Agriculture remains an important source of economic growth with primary industry contributing 18 to 20 percent to GDP, notably higher than that of Japan and Korea. • Fisheries also forms a major sector of the economy and is also critical in providing employment opportunities, income and food security. • East China, Suzhou, Hangzhuo, Shanghai,	<u>South China Sea</u> • While sectoral composition and contribution to GDP varies among the nations, Singapore, Malaysia, Brunei and Indonesia are ranked ahead of China, Thailand, Philippines, Vietnam and Cambodia in terms of industrialization. • Subsistence farming and fishing remains the major activities outside of the main urban and industrial centres. Fisheries, aquaculture and mariculture are among the major export earners. The SCS is likewise the second busiest	• Indonesian seas support a wide range of economic activities from subsistence agriculture and artisanal fisheries to high technology industries and tourism. It plays a major role in providing food for millions of people, as well as mode of transportation and area of exploration and production of minerals and natural gas. • Ports of importance are Ujung Pandang (Makassar), Kalianget,Surabaya, Jakarta, Ariuna, Cirebon, Tegal and Semarang.	• Supports a wide range of economic activities, from subsistence agriculture and artisanal fisheries to high technology industries. Subsistence farming and fishing are the major activities of large numbers of people outside of the main urban centers. • The coastal areas of the Sulu-Celebes Sea serve as spawning grounds for the entire region and serve as a source of livelihood for the fishing communities. • Other economic activities include oil and gas production from off shore areas and tourism that contributes to both local and national economy.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	and industry.	Wuxi and Nanjin have become important tourist destinations. Income from tourism in Shanghai exceeded 25.4 million USD in May 2004.	international sea lane that carries more than half of the world's super tanker traffic. Gulf of Thailand • The GOT used to be very productive in fisheries but in the past 30 years, there has been a drastic decline in fisheries catches mainly due to overfishing. • Non-living resources exploitation, e.g., oil and gas production, have replaced fisheries since 1990.		• Total volume of fishery products exports in North Sulawesi was registered at USD 70 million and 76 million in 1997 and 1998, respectively.
Priority threats[17]	Freshwater shortage appears to be the most severe environmental impact followed by habitat and community modification and unsustainable exploitation of fish and other living resources.	Highest Priority: Pollution. Other severe threats include Freshwater shortage, habitat and community modification, unsustainable exploitation of fish and other living resources and global change.	Highest priority: unsustainable exploitation of living resources, followed by habitat loss and community medication, freshwater shortage, pollution and global change.	Highest priority: Habitat loss and community modification, with severe levels of environmental, economic and other social and community impacts.	Environmental impacts and threats are prioritized as follows: 1. Unsustainable exploitation of fish and other living resources; 2. Habitat and community modification; 3. Pollution; 4. Freshwater shortage; 5. Global change
Freshwater shortage	Yellow Sea • Severe shortages in parts of China due to uneven distribution of water reserves. These are further aggravated by serious soil erosion, deforestation, land	• Expansion of irrigation, development of industry and population growth have in the past been the major factors behind increased water demands. • Dam construction	South China Sea • Seasonal shortages due to loss of forest and riparian vegetation noted in Vietnam, Thailand, Malaysia and Philippines (with significant saline	• By 2002, some 98 % of freshwater consumption in Indonesia is agriculture-related. Overall demand is further expected to increase to 220% to	• Many of the river systems in the region have been extensively modified through loss of riparian vegetation and major clearing of catchments. • Total water withdrawals in the region are

[17] Based on five predefined GIWA concerns i.e. Freshwater shortage, Pollution, Habitat and community modification, Overexploitation of fish and other living resources, Global change, and the results of the evaluation of severity of each of the GIWA concerns using a set of predefined criteria.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	conversion, excessive water usage for agricultural production and conversion of wetlands along lake shores into rice fields, while less pronounced on the Korean side of the region. • Modification of stream flow in the major rivers has reduced the discharge of water altering the environment and water quality of the Yellow Sea affecting in turn the marine resources and coastal habitats. • On the Chinese side, the number of polluting factories in Huai River Basin has increased from 365 in 1996 to 1,320 in 2002 causing deterioration in nearby habitats due to oxygen depletion. On the Korean side, industrial discharges and agricultural run off also caused oxygen depletion resulting to mass fish kills. • Overextraction of groundwater for industrial and domestic uses has lowered the groundwater tables in several urban centers in the Chinese side	including other projects such as the Three Gorges Dam and the South-to-North Water Diversion Project is anticipated to result in reduction in river run off particularly during the dry season. • Serious pollution in the rivers in Shanghai with more than 92.2% of the river sections contain water not acceptable for domestic use. Hypoxia is a problem in areas adjacent to the Yangtze River Estuary, with flows from various landbased pollution sources that alters the ecosystem. , • Decrease in the availability of water and the concomitant fish productivity in river basins are also caused by the growth in water consumption for irrigation use and industrial development.	intrusion). • Transboundary implications of freshwater shortage include increased potential for upstream/ downstream conflicts (case of Malaysia and Singapore) and conflicts among urban and squatter groups in China. • Surface water quality does not often meet WHO criteria for drinking water. • Access to improved water sources in the region is acute in Cambodia, China, Vietnam and Indonesia <u>Gulf of Thailand</u> • Water is becoming scarce as a result of several dam reservoirs built across most river systems for irrigation, domestic use and hydroelectric generation.	2020. • Limited groundwater potential can meet only part of the urban and rural needs for water supply, while providing irrigation water for very limited areas in the eastern parts of Indonesia (Wallacea and Sahul). In some places, overexploitation of groundwater has led to intrusion of saline water. • From 1990 to 2020 the demand will increase by an estimated 220%. Modification of stream flow due in part to high rates of sediment transport, has severe local effects in the major urban areas of Java (particularly the north coast), and agricultural/ forestry areas of Jawa, Sumatra and South and East Kalimantan, where major loss of riparian vegetation and deltaic wetlands has occurred through effects of logging • Extensive modification of the more than 500 river basins may have occurred through loss of riparian vegetation,	estimated at 142.49 km^3 mainly for agricultural purposes followed by domestic and industrial uses. • Freshwater shortage has caused moderate environmental impact at present and is expected to deteriorate markedly, becoming severe by 2020. • Socio-economic impacts from freshwater shortage in the Sulu-Celebes (Sulawesi) region include: Loss/interruptions to human drinking water supplies particularly in rural areas of the Philippines; Increased costs of irrigation and alternative water supplies, with one-third of the Philippines population having no secure access to potable water; Reduction in future use options; Human health impacts from lack of regular supply of potable water; Increased potential for upstream/downstream conflicts, or conflicts among urban and squatter groups. These are aggravated by the capacity of water authorities for effective

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	while on the Korean side, overextraction has led to saltwater intrusion. <u>Bohai Sea</u> • Severe reduction of stream flow for major river. • More than 30% of the major river basins is polluted with surface waters below the WHO drinking water standards • Large scale salt water intrusion of coastal aquifers.			major clearing of catchments resulting to loss of soils as sedimentation into rivers and streams.	enforcement.
Pollution	<u>Yellow Sea</u> • Mainly from land and sea-based sources as well as atmospheric deposition with majority of pollutants coming from industrial wastewater, domestic sewage, coastal cities, and agriculture and aquaculture areas. • An estimated 1,500 million tonnes of industrial wastewater and 200 million tonnes of domestic sewage flow into the Yellow Sea each year. • Incidence of harmful algal blooms (HABs) increased as a result of eutrophication due to organic pollution,	• Chemical fertilizers, sewage and other nutrients that causes coastal eutrophication, originating from urban centers, agricultural run-off and aquaculture-related activities are the most important sources of pollution. • The main pollutants carried to the East China Sea by the Yangtze River, Mingjiang and Jiulongjiang are COD, nutrients, petroleoum hydrocarbons and heavy metals, which have been on the rise in the recent years. • There were 86 HABs in	<u>South China Sea</u> • Sewage pollution; • River sedimentation and nutrients • environment impact of suspended solid is severe resulting from deforestation over the past 150 years. • Other severe environmental issues include: Habitat loss and modification, through massive deforestation and associated siltation; conversion to agriculture and other land uses (freshwater, coastal and estuarine habitats) and overexploitation and destructive fishing	• Water pollution is of sufficient severity to cause massive fish kills, harvest failure in aquaculture ponds and threats to human health, found in virtually all populated and/or highly industrialised areas of Indonesia. • Pollution of existing supplies is severe in the sub-system, both to surface and groundwater supplies. • No sewage treatment plant is available for any major coastal city in Indonesia and the problem is aggravated by recent increased intensity of rice	• Pollution from industries are concentrated on major urban centers. • Agricultural pollution is also widespread through leaching of fertilizers and pesticides into water courses, massive loss of soils following land clearing and forestry and increasing aquaculture practices. • Food serves as the major industrial contributor of the total emissions of organic water pollution. • HABs have caused paralytic shellfish poisoning in parts of the region. • Environmental impacts from suspended solids are severe, especially in

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	transport by shipping traffic as well as from huge discharge from the Yangtze River. In 2002, a total of 79 HAB incidents were recorded over China's marine areas covering an area exceeding 10,000 km^2 • An estimated 700,000 tonnes of suplhur dioxide is emitted per year by coal-burning power plants, which is a transboundary source of chemical pollution in the region. • High sediment concentration has seriously affected the nursery and spawning areas of many commercially important species including benthic communities. • The amount of floating solid wastes in rivers and coastal waters has greatly increased and there are insufficient number of sanitary landfills ti handle solid waste, particularly on the Chinese side of the region. <u>Bohai Sea</u> • High eutrophication caused by an increase of discharges of nutrient-rich sewage,	2003 which is 8.6 times of that in 1993. • Non-point pollution is extensive and difficult to manage with the lack of appropriate investments to treat pollution before it is discharged.	practices (coastal, estuarine and marine habitats). <u>Gulf of Thail</u>and • Water quality has deteriorated particularly in river mouth areas where low dissolved oxygen and high dissolved organic contents and nutrients from domestic wastes were observed. • Long stretches of shrimp ponds lining the coastline of the GOT discharge wastewater directly to the sea or nearby freshwater canals or rivers. • Eutrophication in coastal waters occur more frequently and the Pb and Cd concentrations in the upper layers of sediment cores in the Upper GOT are higher than the levels 40 years ago.	cultivation and application of chemical fertilisers. • Other threats include oil spills, slowly degrading toxic wastes from chemical and non-chemical industries, agricultural run-off and the dumping of materials such as metals threaten inland and coastal waters. • Continuing deforestation, at the rate of some 1.6 million ha annually is a major contributor to suspended solids in watercourses.	the coastal waters of the Philippines, the result of extensive deforestation and compounded by high rates of erosion and siltation rates that are among the highest on Earth. • Solid wastes have caused moderate environmental impact in the region.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	agricultural and industrial wastes has resulted to frequent occurrences of HABs. • Agricultural run off and industrial wastewater discharge has resulted to chemical pollution. • Commercial and recreational fishing activities reduced by 30-50% due to pollution impacts				
Habitat and community modification	<u>Yellow Sea</u> • More than 30% of the areas of freshwater marshlands, lakes, rivers, lagoons and muddy foreshores and 10% of rice fields have been lost over the past 30 years due to construction of dams, dikes and embankments • Severe losses in the areas of muddy shores, salt marshes, sandy beaches, estuaries and lagoons in localised areas due to erosion, mining, reclamation, road construction, diking and port development. • Significant losses of seagrass beds has occurred in the Korean side of the region. • The neritic system in	• Coastal development, including land reclamation, dredging and conversion of coastal land for industry and housing, aquaculture and agriculture activities, tourist resorts and sand mining are major factors in overall deterioration of habitat and loss. • Water run-off due to soil erosion and deforestation has increased and totals 2.5 million tonnes per year. • Port development, tourism and an expanding industrial base have all damaged the region's rocky coasts, particularly in Zhejiang Province. • Sharp decline in population of migrating	<u>South China Sea</u> • Severe habitat modification manifested in serious depletion of fisheries' nursery grounds where 80 % of coral reefs are degraded or under severe threat with implications on food security, changes in employment and loss of income • Reduced surface area of mangroves, seagrasses beds, coral reefs, and riparian vegetation by more than 30 % in the past several decades, as a result of loss of ecosystems from siltation, development and destructive fishing practices.. • Foreshore reclamation and channel dredging	• An estimated 80% of Indonesia's reefs were highly or moderately degraded and remain under threat from human activities. A comprehensive review of Indonesia's coral reefs by the Indonesian Institute of Sciences (LIPI) estimated that 40% of sites were in poor condition, with living coral cover of less than 25%. By contrast, just 29% of sites were in good to excellent condition, with coral cover of greater than 50%. • Destructive fishing practices are the single largest threat to Indonesia's reefs with costs from fish bombing over the next	• Already exhibits severe loss of ecosystems with permanent destruction as a result of the reduced surface area of marshes, swamps, riparian belts and forest catchments by more than 30% between the 1850s and the 1970s. Loss of riparian vegetation is mainly effects of logging and other destructive land use practices • Human-induced fragmentation of coastal and marine habitats evident from siltation, development and destructive fishing practices. Development of most ports have resulted in foreshore reclamation and channel dredging, while muro-ami, blasting, poison fishing and trawling has

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	terms of its ecosystem services, size and composition of species, food web, species mortality and predator-prey relationships have been seriously modified. • Volume and biodiversity of lakes and rivers changed significantly due to contamination, eutrophication, aquaculture practice and overexploitation. • Muddy shores greatly modified with increased opportunistic organisms. • Species population structure in estuaries significantly modified with increased dominance of HAB organisms due to damming, reduced stream flow and upstream activities. • There has been a replacement of endemic with alien species and biodiversity modification through disease introduction. <u>Bohai Sea</u> • Up to or more than 30%of the areas of critical habitats such as freshwater marshlands,	fish in both the lake and the river as well as biodiversity of fish species due to dam construction. • Pollutants transported and dumped in the East China Sea from land-based sources have a potential link to the harmful algal blooms that have been damaging to the fishery, aquaculture and people's health.	to support development of ports while muro-ami, blasting and poison fishing damaged or destroyed large areas of coral reef. • Local extinction noted in some areas such as the loss of mud crabs in Rayong, loss of turtles and dugongs in many parts of the Philippines and Vietnam through habitat loss and exploitation, and loss of freshwater fishes. <u>Gulf of Thailand</u> • Within 30 years, the mangrove cover was reduced by 47% due to human encroachment and shrimp farming. • Coral degradation in several tourist areas has occurred due to dynamite fishing, boat anchoring and commercial coral collection.	20 years to be at least 570 million USD. • Overall in Indonesia, somewhere between 20% and 70% of habitats are considered lost, with extinction of species occurring at one per day	damaged or destroyed more than 70% of coral reefs throughout the region. • Overfishing has caused changes in population structures and/or functional group compositions and major changes in ecosystem services. • Severe modification of habitats also occurs with changes to riverine habitats and their natural species compliment from introduction. About 100 freshwater fish species from the 3 countries are threatened with extinction.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	wetlands, rivers, lakes, sandy and rocky foreshores and sand and gravel bottoms were lost over the past decade. • Population structure, species composition and ecosystem functions for several habitats. • Salinity intrusion due to decreased freshwater inputs from the Yellow Sea has modified several coastal ecosystems.				
Unsustainable exploitation of fish and other living resources	<u>Yellow Sea</u> • Fish stocks severely overexploited with almost all major stocks being fully fished in the mid-1970s and overfished by the 1980s. • .More fishing effort is required to sustain the same catch • The biomass of fish and invertebrates has declined by 40% from the early 1960s to the early 1980s • Cold-water species such as the Pacific cod is almost extinct. • Catches of major economic species exceeding their maximum sustainable	• The most severe problem for the region at present, with the catch per unit of effort reduced by more than 40 times in last five decades, while wild fish stocks have decreased and the average fish size has shrunk. Fishing effort in the East China Sea has increased dramatically since 1952 which may be the main reason why the fishery resources have decreased considerably in the East China Seas. • The current fishing effort and intensity in the East China Sea are expected to continue to	<u>South China Sea</u> • Much of the status or future viability of fish stocks, as in other neighboring regions are summarized as being illegal, unreported and unregulated (IUU). There are also significant gaps in data on population dynamics for some fisheries. • Many stocks, including demersal reef fish, holothurians, molluscs and crustacean stocks are considered to be exploited beyond Maximum Sustainable Yield (MSY), partly through	• Levels of fishing pressure within the region as a whole range from moderate to severe, providing a complex management challenge, with important linkages to the application of marine protected areas in stock replenishment. • Many of the region's coral reef and pelagic fish have been or are becoming chronically overfished, including major use and increasing threat of destructive techniques, with major loss of production and serious adverse 'cascading' effects to other	• About 70% of Philippine coral reefs are heavily overfished, producing less than 5 tonnes/km2/year, with clear indications of 'trophic overfishing', in comparison with the remaining 30% of reefs which produce in the order of 15-20 tonnes/km2/year. • There is overexploitation of benthic invertebrate fisheries as well as pelagic species such as sharks, tuna and bill fish. There is a notable increase in pelagic fisheries in Indonesia with more than 500 boats plying the Indonesian waters.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	yield levels has occurred in all coastal areas of the region. • By-catches account for about 30% or less of all the fisheries caught • Common destructive fishing practices include indiscriminate trawling, fishing with explosives and use of pesticides <u>Bohai Sea</u> • Yield of several stocks drastically decreased over the past decade. • Indiscriminate trawling, fishing with explosives in lakes occur.	increase. The analysis carried out for the region predicts that its resources will continue to be overfished despite regulation and control mechanisms. The improper management of water resources, coastal eutrophication and an unsustainable fishery have been identified as the most severe issues that are very much correlated with human activities.	overinvestment and with encroachment of large-scale commercial operations, including by foreign vessels using long drift nets into traditional/ artisanal fishing areas. • Severe and unsustainable exploitation lead to reduced economic returns and loss of employment; resource use conflicts; loss of protected species, with human health impacts. <u>Gulf of Thailand</u> • Development of fishery related technology and increasing demand for fishery products, among other factors, have caused a decline in fishery resources as fish diversity and abundance decrease. • Changes in species and size compositions are also observed.	components of the ecosystems. • Based on the limited data available it can be concluded that some of the fisheries have already reached or surpassed their limits. Moreover since it is estimated that 90% of the fishery effort in Indonesia is carried out by artisanal and subsistence fishermen whose catches are not recorded government estimates, annual catches are considered to be gross under-estimates.	• Environmental impact on biological and genetic diversity is noted to be severe in view of the extinctions of native species and local stocks as a result of introductions of Tilapia and African catfish. .
Global changes	<u>Yellow Sea</u> • Sea level rise at rate of around 1.5-2.0 mm/year has been observed in the southern part of the Yellow Sea since 1982 but has not appeared to affect the biodiversity and	• Rise in sea level is a concern mainly as this relate to the economic development of countries bordering the East China sea. Effect is likely on most economically developed areas of China that are mostly	<u>South China Sea</u> • The southern part of the marine region forms part of the “heat engine” of global atmospheric circulation, with complex ocean-atmospheric dynamics. • Changes in sea	• Stands between the Pacific and Indian Oceans and is influenced by annual and inter-annual variations in sea surface temperature (SST) due to a reversing monsoonal system.	• There have been reported changes in the structure of coral reef communities from elevated Sea Surface Temperatures (SSTs) during various coral reef bleaching events. In Tubbataha National Park, mean live coral cover

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	species composition of the aquatic life in the region. • Due to the increased effects of ENSO and El Nino, the flow volume of the warm Kuroshio current has been observed to increase over the past decade may cause localized changes in the hydrological cycle.. . <u>Bohai Sea</u> • Relative sea level rise rate in Yellow River Delta is 8 mm/year and the sea level rise will be 48 cm by the year 2020 leading to critical impacts such as frequency of storm surges and El Nino events	located in the lowland fluvial plains as well as the coastal areas of Japan and Korea. • It is predicted that by 2006, the average sea levels for the coast of East China Sea will be increased by 6-28 mm relative to 2000.	surface temperature will have slight impact on the structure of coral reef communities; • Environmental impacts of global change (using the GIWA assessment) remain slight by 2020. (with uncertainties in climate model predictions) <u>Gulf of Thailand</u> • The impacts of sea level rise are difficult to discern due to land subsidence in the case of Bangkok.	• Changes in SST are already having moderate environmental impact in Sunda and Wallacea, with changes in the structure of coral reef communities during coral reef bleaching events since 1983, notably in Pulau Seribu (Sunda) and with increasingly severe and widespread impact since 1998.	decreased by approx. 19% after bleaching in 1998,and has remained stable through 1999 to 2001.
Roots Causes/barriers to progress[18]					
	• <u>Demographic.</u> Increased industrialization resulted to mass migration and increased demand for food which has enhanced crop farming and fishing activities. Consistent decline of fish catches has encouraged shift from	• <u>Knowledge</u>. Related to problems in fishery management such as insufficient knowledge about the maximum sustainable yield (MSY) of the fisheries resource and lack of systematic monitoring and surveys of fish stocks. Inadequate knowledge on the use	• <u>Economic</u> growth has placed high pressures on the environment. The management of the terrestrial and marine environments has been neglected notwithstanding financial and social stability in the Southeast Asian region. Resources	• <u>Knowledge.</u> Lack of education and awareness on ill effects of destructive fishing techniques • <u>Technological.</u> Materials for destructive fishing readily available. • <u>Economic</u>. Market demand for export and local live seafood in	• <u>Governance and legal.</u> The lack of stewardship and the issue of property rights remain unresolved in most areas. Absence of political will and stakeholder agreement to restrict license numbers, areas for fishing activities and total allowable catch limits. • <u>Technology.</u> Ready

[18] Root causes are identified based on the GIWA causal chain analysis that identifies issues and concerns prioritized during the assessment (ie. priority threats), their immediate and root causes, in order to identify appropriate policy interventions.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	capture fisheries to the uncontrolled or overdeveloped aquaculture. • Knowledge. Lack of awareness on environmental impacts due to excessive use of fertilizers and pesticides. Lack of public awareness on the consequences of destructive fishing practices. Insufficient awareness of the consequences of uncontrolled releases of hatchery produced juveniles and overexploitation of spawning fish, in turn affecting the genetic diversity of wild stocks. • Technology. Poor system for crop irrigation which led to inefficient use of the stream waters. Easy access to improved fishing technologies has encourage efficient and destructive fishing practices and increased number of fishing fleets. Unsustainable use of living resources due to Increased development of aquaculture that were propelled by easy access to improved or	of fertilizers and traditional agricultural practices that contribute to the increasing nutrient loads in surface waters. • Governance. Insufficient fisheries administration capability manifested in the lack of awareness of fisheries resource status, and the absence of imposition of a total allowed catch (TAC) limit or fishing quotas; lack of follow up with respect to regulations that limit nutrient drainage to the coastal waters. • Institutional. Insufficient resources (equipment, personnel, training) and inadequate allocation of financial resources for environmental protection. • Economic. Lack of other viable livelihood opportunities for most fishermen and lack of training. • Demographic. Coastal eutrophication and its positive correlation with increase in population and urbanization.and as a result of the effort to reduce off shore fish catch in recent years	exploitation is significantly local and international market demand driven. • Political. Considerable political influence and high military presence due to territorial disputes. • Demographic. Rapid population growth and migration to marginal lands including coastal wetlands, poverty and limited access to other forms of livelihood. • Knowledge. Lack of/ and inadequate education resources suitable for regional communities on sustainable environmental management practices, climate change, sustainable exploitation of marine resources, management of terrestrial soils and vegetation and proper disposal of garbage. • Governance. Lack of political will and generally ineffective fisheries legislation and enforcement. Poor management practices due to political structures dominated by hierarchy and patronage encouraging	particular has encouraged fishermen to use unsustainable fishing methods to achieve maximum yield at minimum effort. • Governance. Legislation and regulation has traditionally favored exploitation of coastal and marine resources rather than conservation. Inadequate resources and capacity to develop appropriate policy and legislation to address identified impacts and implement existing legislation. • Demographic. Poverty and population growth and their subsistence activities pushes many coastal resources beyond their sustainable limits.	access to improvements in technology related to increasing fishing effort and exploiting a wider range of marine habitats. • Knowledge. Lack of awareness and appreciation of the environment and its renewable services due in part to inadequate investments in scientific assessment and management (e.g. fisheries impact to ecosystems, CPUE, stock recruitment relationships and the life history characteristics of the target species and their role in the ecosystem, 'synecology' of the fisheries as well as the lack of field data. • Economic. The presence of ready available market for seafood encouraging maximum yield with minimum effort. • Demographic related to population growth and poverty that

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	new aquaculture technologies. • Economic. Increased economic growth has changed the economic structure leading to rapid industrial development and urbanization. • Legal. Lack of or insufficient regulations, policy or enforcement mechanism.	and the subsequent increase in mariculture production. • Socio-cultural. Current practice of directly discharging without proper treatment to reduce costs to industry and lack of capacity; removal of vegetation from coastal wetlands for mariculture. • Legal. No appropriate laws and regulations and lack of enforcement of national environmental legislation.	for instance control of commercial fisheries by operators		
Institutional, sectoral and policy context: capacity and policy gaps/Recommended policy options[19]					
	• Adoption of policies, laws, regulations and enforcement mechanisms • Introduction of green production technologies • Integration of river basin management • Adoption of public awareness campaign and stakeholder participation programs • Development of small, rural-oriented urban centers in rural areas to cope with population migration • Finding alternative	• Establishment of a regulatory framework in the region and improvements in compliance through stakeholder involvement; • Investment in legal enforcement and an increase in capacity building to remedy pollution and habitat loss; • Creation of education programs to improve public awareness and participation in actions; • Improvement in	Development and expansion of: • Institutional and capacity-building, including establishment of inter-governmental mechanisms; • Information, education and communication networks; • Functional, integrated network of marine protected areas founded in focused, applied research; • Alternative, sustainable livelihoods for poor coastal populations;	• Better integration of local - provincial - national laws and regulations, to maximize effectiveness of the legislative instruments to control destructive fishing at local - national levels, and meet obligations under international conventions and treaties. • Improved surveillance, enforcement and effective policing of laws to reduce the illegal fi shing practices, including	• Direct on-the-ground community-based conservation programs, particularly focused on improving management of and further development of protected areas, including AIG for locals, linked with: - Assessment programs for identification of critical areas for biodiversity (e.g. through government agencies and NGOs; - Training programs to build additional long-term capacity among government, NGOs, and communities;

[19] Policy options and strategic action programs were formulated to address root causes of identified environmental issues.

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	energy sources to reduce the use of petroleum • Training programs on sustainable aquaculture production technology, and relocation programs for traditional fisherment • Alternative livelihood programs to reduce fisheries capacity. Freshwater shortage: • Implementation of relevant irrigation system(s) within the framework of integrated river basin management programs for crop production; • Implementation of integrated forest management practices for sustainable management of forest resources; • Implementation of integrated land management and integrated coastal management programs to cope with the occurrence of natural disasters; • Encourage public participation in the planning and implementation of development activities associated with forest management.	opportunities for increasing revenue and employment from environmental protection industries; • Enactment of legislation and international agreements to reduce pollution from land-based activities. Overexploitation of living resources in the East China Seas • International cooperation among Japan, Korea, and China on a new fisheries order in the Northeast Asian seas, in areas of expanding seasonal fishing bans and structured bans. • Promote sustainable fishing industry through integrated planning and policy making with significant role for strategic, sectoral or regionally integrated environmental assessments as an input to the planning process. Eutrophication in East China Seas • Implementation of a regional monitoring system for coastal eutrophication through establishment of an agreement between	• Bio-physical (biodiversity) and socio-economic research focused on improving management effectiveness and efficiency. Key strategic actions include: • Prioritize key data and information required for developing and refining policy, legislation and interventions; • Build and expand partnerships at local, provincial, national and multilateral levels, in government, NGOs, and the private sector, in Research and Development and implementation; • Ensure equitability and ecological and economic sustainability in future resource exploitation, including protection of intellectual property and traditional knowledge; • Gather responsible fisheries authorities together with expertise from national and international academic and research institutions to adequately assess the	development and effective implementation of export quotas, catch and fish size limits. • Ongoing and expanded community education programs. • Improved incomes for fishermen through generation of ecologically viable alternative/additional income (ecologically-sustainable mariculture). • Development of alternative legal supply lines for live fish, particularly through mariculture, with increased supply of such maricultured species to supplement reductions in wild-caught stocks. • Engagement of the live food and aquarium fish industries in the management process such as strategies like the Marine Aquarium Council certification-accreditation system. • Expand research and development to 'close' the reproductive cycles of the key mariculture species in captivity, and to develop ecologically	- Multi-lateral integration to maximize effectiveness of obligations under international conventions and treaties (e.g., CBD, WHA, UNCLOS, MARPOL, Ramsar, PEMSEA) On expansion and improved management of protected areas • Review the current administrative frameworks and design strategies to resolve overlapping legal authority and jurisdiction in MPAs; • Retain f exibility in management approach, recognising the value of co-management through small-scale local, community-based approaches and larger scale internationally-supported management initiatives (see Annexes IX and X); • Design and foster implementation of a system whereby each municipality or village (e.g. Barangay in the Philippines) is empowered to assist in the management of (or manage) the local MPA; • Encourage government and private sector to

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	• Address Insufficient investment in facilities for pollution prevention and wastewater treatment through promotion of market incentive systems; • Enhancement of laws and enforcement mechanisms related to pollution prevention and wastewater treatment practices. • Development and implementation of educational and public awareness campaign programs for good agricultural practices. • Development and implementation of stakeholders participation and consultation programs in association with environmental management. <u>Habitat and community modification</u> • Development and enforcement of suitable laws and regulations to promote good practices in agriculture and to restrict the introduction of alien and invasive species for aquaculture. • Creation and implementation of public awareness	neighbouring countries (Japan, Korea and China), registration and monitoring of pollution sources, environmental assessment of pollution impacts and selection of indicator species for marine water quality. • Organisation of an institutional network in the field of marine water quality to provide an assessment of eutrophication-related issues, e.g. effects on ecosystems and biodiversity, including a network for the systematic observation of coastal waters • Definition of a financial mechanism for monitoring activities that allows for intercomparision of monitoring results and establishment of a joint consultation board, <u>Habitat and community modification</u>. • Public awareness on the health of the ecosystem • Participation, shared responsibility and decisionmaking in areas such as integrated coastal management	state of fisheries in territorial waters; • Develop regional agreements on providing MPAs within territorial waters to help ease the pressure on sites that are heavily overfished; • Develop national coastal management plans to underpin these regional MPA agreements • Promote a united call to establish a regional database and monitoring that allows for periodic assessments of key coastal ecosystems; • Ban further conversion of wetlands, estuaries and mangroves into man-made facilities; • Establish protocols to assist national environment ministries to to determine carrying capacities of estuaries for extensive and intensive aquaculture facilities (e.g. through SEAFDEC); • Provide concrete mechanisms to engage IRRI and FAO to provide organic farming protocols for adoption by small-	sustainable food sources for mariculture species, with opportunities for increased regional collaboration. • Major expansion of the MPA network, with improved management, including major focus on community co management, with development of 'no-take' zones, and protection of spawning aggregation sites. • Development of a functional MPA network based on an ecosystem framework and establishment of 'no-take' replenishment zones, with the development of policy and legal frameworks and including improved understanding of the population biology of the target species, synecology and issues of ecological scale and connectivity in relation to replenishment (e.g. CPUE, traditional knowledge).	carry out integrated coastal zone planning and management (including watersheds), and incorporate protection of critical land areas within the parks or as buffer zones; • Work through ASEAN and other multilateral, international agencies to develop joint programs, including innovative sources of funding, including development of: - Clear written policy in support of site-specific co-management of national parks and other protected areas in Indonesia with expressed support and clear delineation of responsibility to all national park directors to develop flexible co-management structures. - Relevant conservation user fees policies assessed and revised by the Ministry of Forestry and Ministry of Finance in order to clearly support local self-financing for conservation

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	campaign and education programs on good practices in agriculture, on recognising the environmental impact of introducing exotic and invasive species for aquaculture, on agriculture production technologies that minimize the use of fertilizers. • Strengthening the enforcement of policies and laws for pollution prevention and wastewater treatment facilities, exploration and exploitation of oil and mineral resources, and conversion of coastal wetlands for industrial uses. <u>Unsustainable exploitation of living resources</u> • Development of relevant policy and legal framework to restrict the practice of destructive fishing methods. • Development and implementation of alternative livelihood programs to reduce the entry of excessive number of fishermen into the fishing industry. • Development and		scale farmers and multi-national food companies to address impacts caused by nutrient loading from agriculture;		

LMEs	Yellow Sea and Bohai Sea	East China Sea	South China Sea and Gulf of Thailand	Indonesian Seas	Sulu-Celebes Seas
	promotion of sustainable fisheries and aquaculture production methods to enhance fisheries production to meet market demand for seafood. • Development and implementation of policy and law enforcement mechanisms to restrict destructive fishing practices.				

Sources:

1) UNEP 2005. Teng, S.K., Yu, H., Tang, Y., Tong, L., Choi, C.I., Kang, D., Liu, H., Chun, Y., Juliano, R.O., Rautalahti-Miettinen, E. and D. Daler. Yellow Sea, GIWA Regional assessment 34. University of Kalmar, Kalmar, Sweden.
2) UNEP 2005. Qu, J., Xu, Z., Long, Q., Wang, L., Shen, X., Zhang, J. and Y. Cai. East China Sea, GIWA Regional assessment 36. University of Kalmar, Kalmar, Sweden.
3) UNEP 2005. Wilkinson, C., Devantier, L., Talaue-McManus, L., Lawrence, D. and D. Souter. South China Sea, GIWA Regional assessment 54. University of Kalmar, Kalmar, Sweden.
4) UNEP 2005. Devantier, L., Winkinson, C., Souter, D. South, R., Skelton, P. and D. Lawrence. Sulu-Celebes (Sulawesi) Sea, GIWA Regional assessment 56. University of Kalmar, Kalmar, Sweden.
5) UNEP 2005. Devantier, L., Wilkinson, C., Lawrence, D. and D. Souter (eds.). Indonesian Seas, GIWA Regional assessment 57. University of Kalmar, Kalmar, Sweden.
6) Hungspreugs, M., W. Utoomprurkporn and C. Nitithamyong. 2000. The Gulf of Thailand. In C Sheppard (Ed.), Seas at the Millennium an Environmental Evaluation. Volume II, , p. 297-308. Elsevier Science Ltd., Oxford, U.K.

ANNEX 9: TERMS OF REFERENCE OF KEY PROJECT STAFF AND MAIN COMPONENTS

To be completed upon approval of the Project Document by GEF Council, prior to request for CEO endorsement.

ANNEX 10: STAP ROSTER TECHNICAL REVIEW

Attached to the GEF Project Executive Summary

ANNEX 11: LETTERS OF CO-FINANCING COMMITMENT

Attached to the GEF Project Executive Summary

ANNEX 12: LETTERS OF ENDORSEMENT FROM GEF OPERATING FOCAL AGENCIES

Attached to the GEF Project Executive Summary