



United Nations Development Programme

**Governments of Cambodia, PR China, Indonesia, Lao PDR, Philippines, Thailand, Timor
Leste and Vietnam**

**And
United Nations Development Programme**

With the Governments of Japan, RO Korea and Singapore participating on a cost-sharing basis

PROJECT DOCUMENT

Project Title: Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

UNDAF Outcome(s):

CAMBODIA – Outcome 1: Economic Growth and Sustainable Development: National and local authorities and private sector institutions are better able to ensure the sustainable use of natural resources (fisheries, forestry, mangrove, land, and protected areas), cleaner technologies and responsiveness to climate change

PR CHINA - Outcome 1: Government and other stakeholders ensure environmental sustainability, address climate change, and promote a green, low carbon economy.

INDONESIA - Outcome 5: Climate Change and Environment: Strengthened climate change mitigation and adaptation and environmental sustainability measures in targeted vulnerable provinces, sectors and communities

LAO PDR – Outcome 7: The government ensures sustainable natural resources management through improved governance and community participation

PHILIPPINES- Outcome 4: Resilience Towards Disasters and Climate Change: Adaptive capacities of vulnerable communities and ecosystems will have been strengthened to be resilient toward threats, shocks, disasters, and climate change

THAILAND –Goal 4: National development processes enhanced towards climate resilience and environmental sustainability

TIMOR LESTE – Outcome 2: Vulnerable groups experience a significant improvement in sustainable livelihoods, poverty reduction and disaster risk management within an overarching crisis prevention and recovery context.

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:

Output 2.5. Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation

UNDP Strategic Plan Secondary Outcome: Output 2.5.3 Number of countries implementing national and sub-national plans to protect and restore the health, productivity and resilience of oceans and marine ecosystems.

Executing Entity/Implementing Partner:

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)

Implementing Entity/Responsible Partners: PEMSEA Resource Facility (PRF)

Brief Description

This GEF-supported project seeks to reduce pollution and rebuild degraded marine resources through scaling up the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) in Cambodia, PR China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam that share six large marine ecosystems (LMEs), and related catchment areas. It represents the “transformation phase” of a series of GEF support, culminating in the sustainability of the PEMSEA as the regional coordination of mechanism for implementation of SDS-SEA. It also makes a stronger linkage between sustainable development of river basins, coastal and marine areas and local, national and regional investment processes in a “blue economy”.

The project objective is to catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based economy in the East Asian region. This will be achieved through the implementation of three interconnected components comprising of: 1) partnerships in coastal and ocean governance enabling a self-sustaining, country-owned regional mechanism governing the LMEs in the East Asian region, including partnerships with other regional and subregional governance mechanisms; adoption of ocean policy, legal instruments and institutional improvements by national and local governments; and innovative financing mechanisms for the continuing support services required by countries for SDS-SEA implementation; 2) healthy and resilient marine and coastal ecosystems through conservation-focused ICM programs thereby increasing areal extent of healthy and resilient habitats; improving management of over exploited and depleted fisheries; reducing discharge of pollutants from land-based activities and improving water use efficiency and conservation; increasing preparedness and capability of coastal communities to respond to natural and man-made hazards; and use of economic and investment instruments to generate funds to rehabilitate and sustain coastal and marine ecosystem services; and 3) a knowledge platform for building a sustainable ocean-based blue economy by catalyzing resource allocation for ICM, CCA/DRR and SAP/NAP implementation at national and subregional/LME levels in the East Asian region, in partnership with the YSLME and WCPFC projects under the GEF/UNDP program framework entitled “Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments”; the 6 projects under the GEF/World Bank program framework entitled “Applying Knowledge Management to Scale up Partnership Investments for Sustainable Development of Large Marine Ecosystems of East Asia and their Coasts”; GEF IW Learn; and other relevant regional and global KM networks.

Targeting to achieve the 20% (45,000 km) coverage of the region’s coastline by ICM programs, the project strategizes to increase the areal extent and resilience of ecosystems in selected priorities sites of the eight participating countries and to replicate good practices in the application of ICM tools to new sites (Component 2), supported by enabling policy, institutional arrangements and legal environments to scale up ICM implementation on the ground (Component 1). Meanwhile, Component 3 will mobilize broader technical and investment support to ICM up-scaling and implementation at the local level by strengthening the knowledge

base of state of coasts and oceans at local, national and regional levels, and implementation of a series of recognition and certification programs for local governments, ICM professionals, ports, universities and the corporate sector to extend technical services, develop a core human resource base, and catalyze public and private investments and participation in scaling up the implementation of ICM programs.

Programme Period:2014-2018

Atlas Award ID: 00076225

Project ID:00087725

PIMS #4752

Start date: January 2014

End Date: December 2018

Management Arrangements: IGO

PAC Meeting Date: 12 July 2013

**Total resources required (total project funds):
\$167,909,459**

Total allocated resources
(UNDP managed funds)

UNDP (in-kind): \$16,150,000

GEF: \$10,643,992

Other (partner managed resources)

National and Local Governments: \$138,555,467

Non-Government Partners and collaborators:
\$2,560,000

Agreed by Government of Cambodia:

Date/Month/Year

Agreed by Government of PR China:

Date/Month/Year

Agreed by Government of Indonesia:

Date/Month/Year

Agreed by Government of Lao PDR:

Date/Month/Year

Agreed by Government of Philippines:

Date/Month/Year

Agreed by Government of Thailand:

Date/Month/Year

Agreed by Government of Timor Leste:

Date/Month/Year

Agreed by Government of Vietnam:

Date/Month/Year

Agreed by PEMSEA Resource Facility:

Date/Month/Year

Agreed by UNDP:

Date/Month/Year

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ACRONYMS

ACB	ASEAN Centre for Biodiversity
ADB	Asian Development Bank
BOD	Biochemical Oxygen Demand
CBD	Convention on Biological Diversity
CCA	Climate Change Adaptation
CI	Conservation International
COBSEA	Coordinating Body for the East Asian Seas
CSA	Cost-sharing Agreement
CSR	Corporate Social Responsibility
CTI	Coral Triangle Initiative
DRR	Disaster Risk Reduction
EAFM	Ecosystem-based Approach to Fisheries Management
EAS	East Asian Seas
EAS PC	East Asian Seas Partnership Council
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
IBA	Important Bird Area
ICM	Integrated Coastal Management
IEMP	Integrated Environmental Monitoring Program
IFAD	International Fund for Agricultural Development
IFI	International Financial Institution
IIMS	Integrated Information Management System
ILO	International Labor Organization
IMO	International Maritime Organization
IRBCAM	Integrated River Basin and Coastal Area Management
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
KBA	Key Biodiversity Area
KMI	Korea Maritime Institute
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
MPA	Marine Protected Area
MSP	Medium-Sized Project
N	Nitrogen
NBSAP	National Biodiversity Strategic Action Plan
NCC	National Coordinating Committee
NFP	National Focal Point
NGO	Non-Governmental Organization
NOWPAP	Northwest Pacific Action Plan of UNEP
RTF/NTF	Regional Task Force/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
PES	Payments for Ecosystem Services
PNLG	PEMSEA Network of Local Governments
PO	People's Organization
POI	Plan of Implementation
PoWPA	Programme of Work for Protected Areas
PPP	Public-Private Partnership
PR	People's Republic
PRF	PEMSEA Resource Facility
PSC	Programme Steering Committee
PSHEMS	Port Safety, Health, and Environmental Management System
PSSA	Particularly Sensitive Sea Area
RO	Republic of
RPO	Regional Programme Office
RTF	Regional Task Force
SAP/NAP	Strategic Action Plan / National Action Plan
SBAA	Standard Basic Assistance Agreement
SDS-SEA	Sustainable Development Strategy for the Seas of East Asia
SGP	Small Grants Programme of GEF/UNDP
SOC	State of Coasts
SRF	Strategic Results Framework
STAP	Scientific and Technical Assessment Panel
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
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WCPFC	Western Central Pacific Fisheries Commission
WI	Wetlands International
WSSD	World Summit on Sustainable Development
YSLME	Yellow Sea Large Marine Ecosystem

SECTION I: ELABORATION OF THE NARRATIVE

PART I: Situation Analysis

INTRODUCTION

1. The Sustainable Development Strategy for the Seas of East Asia” (SDS-SEA) was adopted by 12 East Asian countries in December 2003. The ongoing GEF-supported project, entitled “Implementation of the SDS-SEA”, features the mobilization of the necessary partnership arrangements, operating mechanisms, intellectual capital, support services and resources for the achievement of a shared vision of sustainable use of coastal and marine resources of the region and the development targets of the WSSD Plan of Implementation as well as those of the UN Millennium Development Goals (MDG).

2. The ongoing project is also part of a “two-project” package that was submitted to GEF Council for approval in 2007, 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 has been 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 to overcome barriers to investment by the public and private sectors.

3. The duration of GEF proposed support is 10 years, consisting of a transition period, a transformation period, and a sustainable operation period. The ongoing project has covered the transition period. This Project Document intends to cover the transformation phase of GEF support. Among other things, it intends to catalyze political commitment, actions and investments to achieve targets set out in the SDS-SEA. The Terminal Evaluation of the ongoing phase recommends that:

“The focus of the further, planned GEF intervention be on reinforcing and building upon the considerable number of successful, major initiatives that have characterized past interventions. The best example is PEMSEA’s focus on development and implementation of ICM to all levels of government within the participating countries.”¹

4. In this spirit, this Project Document outlines the rationale, analysis, strategy and supporting data / information for the initiative on scaling up implementation of the SDS-SEA.

² Laroche, David A., and Dr. Clive Wilkinson. Terminal Evaluation of “Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)”, 02 November 2012, p. 15

CONTEXT AND GLOBAL SIGNIFICANCE

Geographic scope

5. The East Asian Seas include six semi-enclosed and interconnected large marine ecosystems (LMEs), including Yellow Sea, East China Sea, South China Sea, Sulu-Celebes Sea, Indonesian Sea and Gulf of Thailand. Collectively these LMEs occupy a total sea area of 7 million km², a coastline of 234,000 km, and a total watershed area of about 8.6 million km². A brief, updated profile of each LME is presented in **Annex A** of the Project Document.

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



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

systems within the region of the Seas of East Asia include: (a) 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; (b) the Yangtze river in China, Asia's longest river and a major trade and transportation route; (c) the Yellow River, China's second longest river, passing through the densely populated North China Plain before reaching the Bohai Sea; and (d) the Red River with one of the largest watersheds in Southeast Asia, originating in China and passing through Vietnam to the South China Sea.

Regional Context

7. In 2003, Brunei Darussalam, Cambodia, China, DPR Korea, Indonesia, Japan, Malaysia, Philippines, RO Korea, Singapore, Thailand and Vietnam signed the Putrajaya Declaration, which adopted the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) during the First East Asian Seas Ministerial Forum held in Putrajaya, Malaysia (2003). In 2006, Lao PDR and Timor-Leste agreed to adopt and implement the SDS-SEA.

8. The SDS-SEA incorporates the main principles, objectives and action programmes of a number of international and regional instruments and agreements, including the UN Convention on the Law of the Sea (UNCLOS), the UN Framework Convention on Climate Change (UNFCCC), Agenda 21, the Convention on Biological Diversity (CBD), the Global Programme of Action for Protection of the Marine Environment from Land-Based Activities (GPA), the World Summit on Sustainable Development, the UN Millennium Development Goals (MDGs), and a number of conventions associated with the International Maritime Organization (IMO). The SDS-SEA contains six strategies and 227 action programmes for sustainable development of coasts and oceans. Importantly, the SDS-SEA embodies a shared vision of the countries of the region for sustainable

development of coasts and oceans, and a mission to implement the strategy through a number of partnerships and other arrangements.

9. While the SDS-SEA is considered a non-binding instrument, over time countries have developed confidence in the development and application of integrated coastal and ocean management as an effective tool for achieving the SDS-SEA objectives. Ministerial meetings conducted among countries in 2006 and 2009 recognized these accomplishments and agreed to work towards achieving strategic targets that represent individual and collective commitments to scaling up SDS-SEA implementation across the region, namely:

- Target 1: A self-sustained regional partnership mechanism for the implementation of SDS-SEA²
- Target 2: National coastal and ocean policies and supporting institutional arrangements in place in at least 70% of Partner Countries³
- Target 3: ICM programs for sustainable development of coastal and marine areas and climate change adaptation covering at least 20% of the region's coastline, and
- Target 4: A report on the progress of ICM programs every three years, including measures taken for climate change adaptation.

10. The four targets represent the desired higher order outcomes of SDS-SEA implementation at the national and regional level to 2015. SDS-SEA has benefitted from support of the Global Environment Facility (GEF) and participation of the United Nations Development Programme (UNDP), the World Bank and fourteen (14) other international and regional organizations.

11. At the Fourth Ministerial Forum held in Changwon, RO Korea (2012), the Governments of Cambodia, PR China, Indonesia, Japan, Lao PDR, the Philippines, RO Korea, Singapore, Timor-Leste, and Viet Nam adopted the five year, regional Implementation Plan for the SDS-SEA 2011-2016 (Thailand participated as an observer). Actions identified in the SDS-SEA Implementation Plan have been prepared within the context of the 6 strategies of the SDS-SEA and their associated objectives, as well as the 4 regional targets (above) agreed by Country Partners. It consists of five components, namely: governance; ICM scaling up; monitoring; evaluation and reporting; capacity development and knowledge management; and sustainable financing. Key actions under each of the components are summarized in Table 1:

Table 1. Key Actions of Regional SDS-SEA Implementation Plan (2012-2016)

Components	SDS-SEA Targets	Actions
1. National and regional governance	Target 1	Complete the transformation of PEMSEA into a self-sustaining regional governance mechanism
	Target 2	Achieve coastal and ocean policy
2. ICM scaling up to cover at least 20% of region's coastlines	Target 3	Maximize local government capacity
		Realize climate change adaptation (CCA) and disaster risk reduction (DRR) measures in

² Haikou Partnership Agreement on the Implementation of the Sustainable Development Strategy, 2006.

³ Manila Declaration on Strengthening the Implementation of Integrated Coastal Management for Sustainable Development and Climate Change Adaptation in the Seas of East Asia region, 2009

Components	SDS-SEA Targets	Actions
		vulnerable coastal areas through ICM programs
		Integrated sustainable use of coastal and marine ecosystem services into ICM programs in biodiversity and fishery hotspots
		Advance water supply conservation and management and pollution reduction and waste management through ICM programs in priority coastal and watershed areas
3. Monitoring, evaluation and reporting	Target 4	Implement integrated environmental monitoring to strengthen knowledge and understanding of ecosystems and their management from “ridge to reef”
		Apply the State of Coasts reporting system
4. Capacity development and knowledge management	Enabling	Establish accredited ICM and special skills training courses and programs
		Enable ICM Learning Center, National and Regional Centers of Excellence and educational institutions to train, educate and build awareness in coastal and ocean management
5. Sustainable financing	Enabling	Build a knowledge platform and support network to facilitate scientifically sound decisions and investments in sustaining ecosystem services
		Increase public and private sector investments in enterprises, technologies, practices and services that contribute to a sustainable ocean-based economy
		Mobilize donors, domestic and foreign investors and other concessional sources of funding to help address program gaps in means and capacity

12. To facilitate implementation of SDS-SEA at national level, Country Partners including Cambodia, PR China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam have prepared their country-specific implementation plans to parallel the regional SDS-SEA implementation plan. To date, China has already adopted its 5-year implementation plan, while other countries are at different stages of adoption. Table 2 details the process of adoption of the 5-year implementation plans in participating countries of this project.

Table 2. Status of National 5-year SDS-SEA Implementation Plan in Participating Countries

Country	Title	Status
Cambodia	Five Year Implementation Plan of SDS-SEA in Cambodia (2013-2017)	In the process of adoption
China	China’s Framework Plan for SDS-SEA Implementation (2012-2016)	Adopted in 2012
Indonesia	SDS Plan through the Implementation of ICM	In the process of adoption
Lao PDR	National Water Strategy	In the process of adoption

Country	Title	Status
Philippines	National ICM Program (2012-2016)	In the process of adoption
Thailand	5-year SDS-SEA Implementation Plan	In the process of adoption
Timor Leste	SDS Plan through the Implementation of ICM (2012-2015)	In the process of adoption
Vietnam	5-year Framework Plan (2012-2016) for SDS-SEA Implementation	In the process of adoption

Status in Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

13. In 2012, PEMSEA reviewed the progress, projects and initiatives undertaken by countries of the region, Non-Country Partners of PEMSEA and regional organizations and programs that contributed to the SDS-SEA objectives and action programs since 2003⁴. Specifically, the document reviewed the current status of the regional coordinating mechanism, national coastal and ocean policy development and ICM program implementation across the region. The results of assessment of progress in achieving the four targets are as below:

Target 1: A self-sustained regional partnership mechanism for the implementation of SDS-SEA

14. Eight countries (Cambodia, DPR Korea, PR China, Indonesia, Lao PDR, Philippines, RO Korea and Timor Leste) signed the Agreement recognizing the PEMSEA Legal Personality in 2009. In addition, an assessment of all GEF-supported regional and sub-regional projects in the East Asian Seas region, conducted in 2010, concluded that PEMSEA and the SDS-SEA, respectively, provide the strongest regional mechanism and framework for coastal and marine management in the East Asian Seas region⁵.

Target 2: National coastal and ocean policies and supporting institutional arrangements in place in at least 70% of Partner Countries

15. Countries have shown considerable progress in formulating and initiating national action plans for sustainable coastal development. Since 2003, nine (9) of the 12 PEMSEA Country Partners have initiated development and/or are now in process of adopting and implementing respective national coastal and ocean policies and strategies. **Annex B** details the progress and achievements of the PEMSEA countries in this regard.

16. In addition to coastal and ocean policy, various sectoral policies have been developed and adopted by governments of the region over the past 10 years, which support the objectives of the SDS-SEA, covering:

- Environmental management and protection
- Hazards (e.g., disaster risk reduction, climate change, oil spills, etc.)
- Biodiversity conservation and sustainable use

⁴ Regional Review: Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA 2003-2011; July 2012.

⁵ East Asian Seas Stocktaking Meeting Chair's Summary, Manila, Philippines, 28-29 October 2010

- Fisheries management
- Water resources management, and
- Pollution reduction.

17. Of the nearly 200 reported developments, inputs from other countries suggest that the majority of policies and action plans over the past 10 years have focused on biodiversity (e.g., habitat protection and conservation), followed by environmental protection, pollution reduction, fisheries/food security and water resources management. During this period (2003-2011) countries have enacted over 80 pieces of legislation directly supporting the SDS-SEA. Annex B contains a summary of the development in legislation in the region.

18. National interagency coordinating mechanisms for coastal and ocean management programs have been established and operational in a number of countries, including Cambodia, Indonesia, Japan, RO Korea, Singapore, Thailand and Timor-Leste. In Lao PDR the government has recently approved the formation of a River Basin Committee to coordinate river basin development in the country. In 2013, China established National Oceanic Commission to coordinate ocean policy at national level. The Philippines and Vietnam are still in the process of developing their interagency coordinating mechanisms. Annex B lists the various national coordination mechanisms in ocean affairs.

Table 3. Area of coastline covered by ICM programs by EAS country (June, 2013)	
Country (Length of total national coastline, excluding some associated islands)	Length of Coastline (km) (percentage of total national coastline)
Cambodia (440 km)	140.5 (32%)
China (32,000 km)	3,844.55 (12.1%)
DPR Korea (2,880 km)	127.00 (4.41%)
Indonesia (95,161 km)	3,047.46 (3.2%)
Japan (35,000 km)	Data from 5 sites to be confirmed
Malaysia (5,087.5 km)	156.00 (3.06%)
Philippines (36,289 km)	6,384.00 (17.6%)
RO Korea (13,509 km)	11,915.00 (88.2%)
Singapore (182.4 km)	182.4 (100%)
Thailand (3,148 km inclusive of islands)	171.78 (5.46%)
Timor Leste (735 km)	142.00 (19.3%)
Vietnam (3,269 km)	1,189.00 (36%)
TOTAL	27,299.69 (Approximately 12%)

Target 3: ICM programs for sustainable development of coastal and marine areas and climate change adaptation covering at least 20% of the region's coastline

19. Countries are progressing towards Target 3, with ICM programs covering approximately 12% of the region's 234,000 km coastline, as summarized in Table 3⁶ (more detailed information by site and consolidated with targets for this proposed phase is contained in the next section and SRF). To facilitate the development, implementation and replication of ICM programs, PEMSEA enhanced its capacity development programs to support the demands of the countries for skilled human resources, tools and instruments and services. Between 2003 and 2011 PEMSEA conducted 84 training and workshop activities involving 2,311 participants in 10 Partners Countries. In 2012, an additional 600 individuals received specialized training. Major regional training workshops covered a wide number of topics including a) ICM development and implementation, b) ICM training of trainers, c) project proposal development, d) project management (including financial management), e) oil spill preparedness and response, f) planning, implementation and enforcement of land and sea use zoning, g) tourism zone development, h)

⁶ Lengths of coastlines vary by source.

shoreline assessment and oil spill clean up, i) total maximum daily pollutant loading, j) sustainable fisheries management, k) port safety, health and environmental management, l) port auditing, m) integrated information management systems (IIMS), and n) SOC reporting.

20. PEMSEA has also established ICM Learning Centers, mobilized regional and national task forces, partnered with the Korean Maritime Institute (KMI) to set up a regional twinning network on integrated river basin and coastal area management (IRBCAM), and recognized two Regional Centers of Excellence (Centre for Marine Environmental Research and Innovative Technology (MERIT) in Hong Kong, and Marine Science Institute, University of the Philippines). To date, seven institutions have been recognized as ICM Learning Centers, which have supported collaborative activities and training and support services for ICM sites (refer to Table 4).

Table 4. PEMSEA ICM Learning Centers

ICM Learning/Training Centers	Collaborative Activities (2008-2011)
Royal University of Phnom Penh, Cambodia	<ul style="list-style-type: none"> • National ICM Training Course 1 in Cambodia
Center for Coastal and Marine Resources Studies, Bogor Agricultural University, Indonesia	<ul style="list-style-type: none"> • National ICM Training Course (2) in Indonesia • Resource person for National ICM Training Course in Cambodia and Timor Leste • Technical support for ICM Policy Development and Implementation in Timor Leste and Indonesia • Training on State of Coasts Report in Indonesia
Xavier University- Ateneo de Cagayan, Philippines	<ul style="list-style-type: none"> • Planning Workshop for ICM Development and Implementation in Macajalar Bay
De la Salle University-Lipa, Philippines	<ul style="list-style-type: none"> • ICM Training of Trainers for the ICM Core Team of DSLU-Lipa • Resource person in ICM Training Course for Region 6, Philippines
University of Danang, Vietnam	<ul style="list-style-type: none"> • National ICM Training Course in Vietnam
Xiamen University, China	<ul style="list-style-type: none"> • National ICM Training-Trainers Workshop, Xiamen, China

Target 4: A report on the progress of ICM programs every three years, including measures taken for climate change adaptation.

21. The Guidebook for the State of the Coasts (SOC) Reporting (for local governments implementing ICM in the East Asian Seas region) was approved by the EAS Partnership Council in July 2011, for the purpose of consolidating information coming from administrative, social, economic and environmental sectors, including: a) establishing baseline conditions in a coastal area prior to the start-up of an ICM program, b) assessing progress, achievements and shortcomings of on-going ICM programs, and adjusting to changing conditions regarding various governance, social, economic and environmental changes or issues, and c) developing recommendations for continual improvement of ICM programs by Local Chief Executives/local governments. The PEMSEA Network of Local Governments for Sustainable Coastal Development also adopted the State of Coasts reporting system in July 2011 through the Dongying Declaration on Building a 'Blue Economy' through Integrated Coastal Management. The Declaration commits the Network to apply the SOC reporting system to 100 percent of its members by 2015, to identify and validate social, economic and environmental status and changes in coastal and marine areas, and measure progress and impacts of ICM implementation among local governments of the region. To date, 19 of the 29 PEMSEA demonstration and parallel sites, majority of which are members of PNLG, have initiated their respective SOC reports.

Table 5. PEMSEA Non-Country Partners

- ✓ ASEAN Centre for Biodiversity (ACB)
- ✓ Conservation International (CI) – Philippines
- ✓ Coastal Management Center (CMC)
- ✓ International EMECS Center
- ✓ IOC Sub-Commission for the West Pacific (IOC-WESTPAC)
- ✓ International Ocean Institute
- ✓ Asia Regional Office of IUCN, International Union for the Conservation of Nature (IUCN-ARO)
- ✓ Korea Environment Institute (KEI)
- ✓ Korea Maritime Institute (KMI)
- ✓ Korea Ocean Research and Development Institute (KORDI)
- ✓ Northwest Pacific Action Plan (NOWPAP)
- ✓ Ocean Policy Research Foundation (OPRF)
- ✓ Oil Spill Response Limited (OSRL)
- ✓ PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG)
- ✓ Plymouth Marine Laboratory (PML)
- ✓ Swedish Environmental Secretariat for Asia (SENSA)
- ✓ UNDP/GEF Small Grants Programme (SGP)
- ✓ UNDP/GEF Yellow Sea LME Project (YSLME)
- ✓ UNEP-Global Programme of Action for the Protection of Marine Environment from Land-based Activities (GPA)

22. The PEMSEA ICM Code, which is now being field-tested, is designed to provide assistance to local governments to develop and implement an “ICM system”. It will simultaneously strengthen environmental and quality managements systems consistent with two international standards, the ISO 14001:2004 and ISO 9001:2000. The Code facilitates two supplementary objectives, including: a) to enable local governments to conduct a self-assessment concerning their levels of progress, and gauge how well they are doing in developing and implementing an ICM program, and b) to provide a set of measurable indicators covering governance, stress reduction and impact/benefits (social, economic and ecological), which can be used by a third party to recognize/certify the performance of the local government in conformity with the ICM Code.

23. The indicators for the Code correspond to the PEMSEA Sustainable Development Framework in Figure 4, and can be applied in many different political, social, environmental and economic situations. In combination with the State of the Coasts (SOC) Reporting System, the ICM Code will facilitate the assessment across ICM sites within a country and across national boundaries.

24. Capacity development has also been supplemented by support from various international organizations, donors and partners that have helped to meet needs and gaps in human and technical resources in order to advance implementation of the SDS-SEA. These “Non-Country Partners” are identified in Table 5, while **Annex C** provides more detailed information on their contributions and achievements during the current phase. It is anticipated that new and updated agreements will be struck with these, and additional Non-Country Partners, during the proposed next phase.

25. A GEF Stocktaking Meeting in October 2010⁷ on priority actions and financing gaps in the EAS region, highlighted key elements for scaling up of local, on the ground interventions, among the investment priorities identified, two were considered of highest priority in existing LME Strategic Action Plans (SAPs) and country strategies. These were:

- a. To enhance efforts to reverse coastal pollution (the “brown” agenda), and
- b. To address unsustainable fisheries and the loss of critical coastal and marine habitats (the “blue” agenda).

26. Climate change impacts and climate variability were seen by the GEF Stocktaking Meeting as cross-cutting issues, to be addressed by building ecosystem resilience into the management of both of these agendas, through a concerted scaling up effort to which PEMSEA Country Partners had

⁷ East Asian Seas Stocktaking Meeting Chair’s Summary, Manila, Philippines, 28-29 October 2010

committed in 2009 (The Manila Declaration). This was reinforced by the responses of the World Bank and UNDP, namely the development of their respective medium-term GEF-supported investments programs for the EAS region. Both agencies incorporated the SDS-SEA framework and PEMSEA partnership mechanism into their program framework documents (PFDs) based on prior commitments of the countries. The World Bank-GEF led program is a USD 796 million investment program, including a GEF grant of USD 43.5 million which will focus on a) pollution reduction, b) sustainable coastal and marine resources management, and c) knowledge management. The UNDP-GEF program is a USD 368 million investment program, including GEF grant of USD 20 million, which focuses on a) institutional and financial sustainability of regional and sub-regional marine and coastal governance arrangements, b) protecting habitats and implementing ecosystem approaches to fisheries and aquaculture management; reducing pollution and improving resiliency of coastal areas and LMEs to climate change and other hazards, and c) knowledge management platforms to ensure programs are translated into action.

27. The term “blue economy” is gaining currency. In 2012, Ministers and Senior Government Officials of PEMSEA Partner Countries adopted the Changwon Declaration⁸. In the Declaration, the Governments recognized the SDS-SEA as an appropriate platform and framework for overcoming the challenges to sustainable development and for building and ocean-based blue economy in the region. They further committed to use the 5-year regional SDS-SEA Implementation Plan to support the implementation of actions identified the RIO+20 outcome document, The Future We Want, and other relevant international and regional commitments related to coasts and oceans.

28. The “blue economy” is essentially a platform for innovation⁹, which, in practice, draws more attention and focus on sustainable oceans and seas. This is distinct from the “brown” and “green” economies, which focus on pollution reduction / waste management, and terrestrial (e.g., grasslands, forests, etc.), landscapes respectively. The Changwon Declaration commits countries to practical, on the ground interventions which will draw a tighter connection between ICM approaches, tools and methods, and generating social, economic and environmental benefits for populations living in coastal and marine areas of the East Asian Seas, and beyond.¹⁰ It promotes “innovation” in the sense that emerging and new types of ecosystem-based management tools and approaches can be piloted, tested, applied, documented and replicated / scaled up to the extent possible.

29. These two program commitments, i.e., the program frameworks adopted respectively by the World Bank and UNDP and the Changwon Declaration of the PEMSEA Partner Countries, clearly address relevant recommendations of the GEF Annual Impact Report 2012¹¹, namely: a) a more robust programmatic approach should be developed for GEF international waters support to the South China Sea and adjacent areas; and b) GEF should give more attention to supporting countries to work together to address concerns related to regional environmental goods and services. The proposed project will serve to operationalize both, by coordinating and implementing interconnected and synergistic actions at the regional, national and local levels.

CONTINUOUS CHALLENGES, ROOT CAUSES AND IMPACTS

⁸ Changwon Declaration Toward an Ocean-based Blue Economy: Moving Ahead with the Sustainable Development Strategy for the Seas of East Asia, Changwon City, RO Korea, 12 July 2012

⁹ Refer to Pauli, Gunter. *The Blue Economy: 10 Years, 100 Innovations, 100 Million Jobs*. Paradigm Publications: 2010.

¹⁰ The PEMSEA interpretation of, and actions related to, strengthening of the blue economy in the ICM context are elaborated in the Project Strategy section related to Outcome 8.

¹¹ GEF Annual Impact Report 2012, Evaluation Report No. 76, October 2012

30. The coastal and marine ecosystems of the EAS region are central to the development of the economies of the countries which share its resources. As such, coral reefs, mangroves, sea grasses, wetlands and other coastal habitats which are part of these ecosystems are exposed to varying degrees of pressure and show signs of continuous and serious degradation due to human activities. Water quality in seas, coastal areas and river basins is at risk of serious deterioration due to unsustainable practices and polluting human activities.

31. The primary root cause for threats against coastal and marine habitats, waterways and river basins systems include population growth and the increasing demand for resources, as more and more people migrate to coastal areas, and with expanding developments, the pace is set to increase at a higher rate. For example, in China, the establishment of special economic zones in coastal areas has given rise to both domestic and international migration, with currently estimated total migrant coastal population of over 30 million.¹² A second major root cause for threats against coastal and marine areas, is the weak or ineffective governance systems that are characterized by lack of recognition of property rights, open access systems, overlapping jurisdictions of agencies, among others, which allow threats to persist or grow. A complicating factor, is that threats are interrelated and trans-boundary in nature. The major recurring challenges to coastal and marine ecosystems in the EAS region are discussed briefly below:

Land use transformation and sedimentation in coastal and upland areas

32. Expansion of agricultural land is the most pervasive land conversion process in East Asia. About 14 of 48 Asian countries have more than 50% of their land surface area under cultivation. In South Asia, 73% of the total land area is under agriculture, and almost half of the South East Asia's land area is in agricultural use. Land use management on these agricultural lands, such as maintaining soil fertility by chemical fertilization and irrigation and controlling pests by chemical pesticides, has intensified. From 1961 to 2002, fertilizer use in Asia has increased by approximately 1,900%, and irrigated agricultural area has increased by around 115%. These land use changes associated with agriculture have positively impacted on crop yields in Asia, resulting in remarkable increases.

33. The downside however, is that large scale deforestation for cropland development has led to soil degradation of over 27% in South and South East Asia, due in part, to comparatively high levels of irrigation, which depletes freshwater resources and results in salinization of fertile lands. This is exacerbated by increased use of fertilizers and pesticides which flow into lakes, streams and river systems. Forest degradation and deforestation has led to reductions in biomass and soil carbon by 58% and 18% respectively in South and South East Asia (up to 1995) and resulting release of carbon into the atmosphere. It has also contributed to significant declines in species richness and population densities of flora and fauna across the region. The regional expansion in aquaculture, particularly shrimp farming has come at the expense of mangrove forests, as well as agricultural land in coastal areas.¹³

34. Sedimentation or the settling of suspended particles in water is another side of the same problem. Quantitative assessment of sedimentation is always difficult because sediment concentrations and settling rates are extremely variable, depending on the detailed history of rain, wind, and waves at each site. Widespread agriculture and deforestation increase sediment loads to

¹² MacKinnon, John, Yvonne I. Verkuil and Nicholas Murray. "IUCN Situation analysis on East and Southeast Asian intertidal habitats with particular reference to the Yellow Sea (including the Bohai Sea). Occasional Paper of the IUCN Species Survival Commission No. 47", IUCN Gland, Switzerland and Cambridge UK. 2012, p.21.

¹³ Hall, Derek. "Land Control, Land Grabs and Southeast Asian Crops Booms". Paper presented at the International Conference on Global Land Grabbing, 6-8 April, 2011.

rivers and streams and reduce the ability of rivers to regulate flows. This is pronounced in East Asia where source rocks are erodible and seasonal precipitation is heavy. Deforested areas are often subject to accelerated rates of soil erosion, increased surface runoff and sedimentation of streams and rivers, reduced infiltration and ground water recharge, with adverse water quality impacts on surface water and ground water resources.

35. In addition to deforestation, other land-based activities such as mining can contribute to sediment discharges that have potentially damaging impacts. Toxic substances can bind to sediment and are transported to coastal waters through sedimentation. These toxic substances can cause scarring, death, or reproductive failure in fish, shellfish, and other marine organisms. In addition, they can accumulate in fish tissue, leading to fish consumption advisories. Sedimentation and suspended sediment in water columns may affect coral populations and surrounding aquatic life by smothering adult corals or imposing physiological costs by reducing light availability for photosynthesis or increasing the need for active sediment removal. Discharges from mines in the Sekong, Sesan and Srepok Rivers (3S) of the Mekong Basin will have trans-boundary implications arising from changes in the flows of rivers, increased sediment discharge, release of toxic materials into the water courses and risk of fish mortality. Cambodia would be on the downstream of mining operations in Laos, discharging into the Sekong, and in Vietnam discharging into the headwaters of the Sre Pok. This is a concern because the Mekong River hosts the world's largest freshwater fishery, comprised of around 800 species, and supporting a population of 65 million people.¹⁴

36. Sometimes sediment disasters can occur in the form of debris flow, slope failure or landslides, and triggered by a number of different factors, including rainfall, volcanic or seismic activity.¹⁵

Land reclamation in coastal and wetland areas

37. Several different drivers encourage the reclamation of coastal zones, primarily tidal flats. Most of these are financial in nature. More advanced countries reclaim land for urban and infrastructure development. Normally these investments are included in national or local government development plans. Less developed countries are subject to local pressures to undertake smaller reclamations for agricultural or aqua cultural conversion when costs are low. In tropical countries this usually means that intertidal mangroves need to be cleared, which also causes damage and siltation of adjacent coral reefs. The growth of threats appears to be accelerating, based on these trends:

- a. Population densities are expected to increase beyond their current levels in most EAS countries, particularly China and Indonesia
- b. Costs of land reclamation (i.e., per square or cubic meter) are generally cheaper than rental or purchase of land in some countries, especially in urban areas. This is primarily because the full environmental costs have not been factored into the benefits analysis (i.e., loss of ecosystems services)
- c. Marine-based industries such as ports, tourism, shipping, mining, oil and gas, salt production, etc. contribute significantly to the gross domestic product (GDP) of governments in coastal areas. By virtue of economic factors, heavy industries such as steel, automobile, petrochemical plants and other export driven industries are incentivized to relocate to these areas,

¹⁴ <http://www.economist.com/blogs/banyan/2012/07/mekong-river>

¹⁵ <http://www.sabo-int.org/tc/basic.pdf> (The Basis of Sediment Disasters)

- d. Large increases in tourism development result in disturbance to beach areas and increased demand for fish and other seafood. On an annual basis, Sanya in Hainan, China receives 17 million tourists, Phuket, Thailand 4.5 million, and Kuta, Bali, Indonesia, 2.7 million, and
- e. Some scientific and technological advances actually increase use of resources and damage to ecosystems. For example, agriculture and mariculture have both brought added stress to the natural ecosystems. Fishing technologies contribute significantly to the depletion of marine fish stocks, seabed mining and oil and gas exploration, bio-prospecting, the search for new ocean-based food sources, and investments in infrastructure to respond to climate change impacts, such as physical sea defences to storms and rising sea levels – all place additional stresses on coastal ecosystems.

Coastal erosion

38. Coastal erosion, or the wearing away of land and the removal of beach or dune sediments by wave action, tidal currents, wave currents, or drainage continues to be a problem in most of the EAS countries. Erosion is exacerbated by waves generated by storms, wind, or fast moving motor craft, which may take the form of long-term losses of sediment and rocks, or merely the temporary redistribution of coastal sediment. Erosion in one location may result in accretion in nearby areas. The International Panel on Climate Change (IPCC) confirms that erosion is the main process that will occur to land, as sea levels continue to rise. As a result, structures built by humans to protect coastal areas will usually be destroyed by the sea as the shoreline recedes. It is estimated that a 30 cm rise in sea level can result in 45 m of landward erosion in some parts of Asia. Climate change and sea-level rise will tend to worsen the currently eroding coasts. Coastal erosion will be enhanced as rising sea levels and declining sea ice allow higher wave and storm surge to hit the shores.¹⁶

39. In the coastal areas of central Vietnam, research has identified 263 erosion sites, where 284 coastal sections and 10 sites have been completely eroded. Erosion occurs in most types of the coasts, with sandy coasts accounting for 93.7% of the total length of erosion sections. Erosion persists in 21 coastal sections with reinforcement structures such as dikes, revetment, piles or tree plantations. Even coastal sections with bedrock basement which had been previously filled by unconsolidated sediments (such as sand, coral and shell debris) are now being eroded. Over 50% of coastal sections being eroded are over 1 km long, 10.6% of coastal sections have been eroded 200 m or more inland. Forty-three percent (43%) of coastal sections are being eroded at a rate of 15 – 30 m/year, while other sections are being eroded at a rate of > 100 m/year.¹⁷

40. Coastal erosion is also widespread in China, and distributed over one-third (about 10,500 km) of its coastline with estimates indicating that 46% of the Bohai Sea coastline, 49% of the Yellow Sea coastline, 44% of the East China Sea coastline (including the Taiwan Island coastline), and 21% of the South China Sea coastline (including the Hainan Island coastline) suffer from erosion. In addition to sea level rise, human-induced activities, such as sand mining, overexploitation of groundwater (causing land subsidence), reclamation and other coastal and riverbank engineering projects have reduced coastal sediment discharge.¹⁸

¹⁶ http://www.ipcc.ch/publications_and_data/ar4/wg2/en/ch10s10-4-3.html

¹⁷ Dr. Ngo Ngoc Cat, Dr. Pham Huy Tien, Prof. Do Dinh Sam, Eng. Nguyen Ngoc Binh. "Status of Coastal Erosion in Vietnam and Proposed Measures for Protection". Unpublished paper. nd.

¹⁸ Feng Cai, Xianze Su, Jianhui Liu, Bing Li, Gang Lei. "Coastal Erosion in China Under the Condition of Global Climate Change and Measures for its Protection" in *Progress in Natural Science*. 19 (2009) 415–426.

Degradation, destruction and over-exploitation of natural resources, including fisheries

41. Exploitative and destructive fishing practices have been widespread in East Asian Seas, and put the long term sustainability and health of ecosystems at risk. Overall, productivity has diminished significantly due to a shrinking resource base and an increasing number of fishers. Concurrently, rapidly increasing demand for fish has accelerated the fishing effort, driven by globalization of markets. About 37% of global fish production is traded internationally, accounting for up to 13% of global annual agricultural trade. Benefits have been overshadowed by the continuous overexploitation due to poor fisheries governance and management.¹⁹

42. The GIWA assessment of the South China Sea, which includes the EEZs of nine countries, highlights the range and severity of the socioeconomic effects of overfishing. Throughout the region, the reduction and collapse of the fisheries has led to a widespread loss of income and employment. In many areas, particularly around the Philippines and Indonesia, fish are mostly exported, causing local fish consumption to decline by one-third. This has contributed to the malnutrition of many children. In coastal communities, alternative livelihoods are rarely available. Injuries and deaths from blast fishing and diving with surface-supplied compressed air (called “hookah”). Conflicts provoked as a result of declining fish stocks are frequent among local fishing groups, and with foreign fishers.²⁰

Common Issues in East Asian Seas Fisheries

- *Overcapacity*
- *Overfishing and declined fisheries resource abundance*
- *Illegal, unreported and unregulated (IUU) fishing*
- *Use of destructive/inappropriate fishing practice/illegal fishing in coastal areas*
- *Conflicts among resource users*
- *Limited capacity of fishing households for alternatives/supplementary livelihood*
- *Debt and poor financial management of small-scale fisheries*
- *Ineffective implementation of existing governance measures*
- *Limited participation of stakeholders in coastal fisheries*

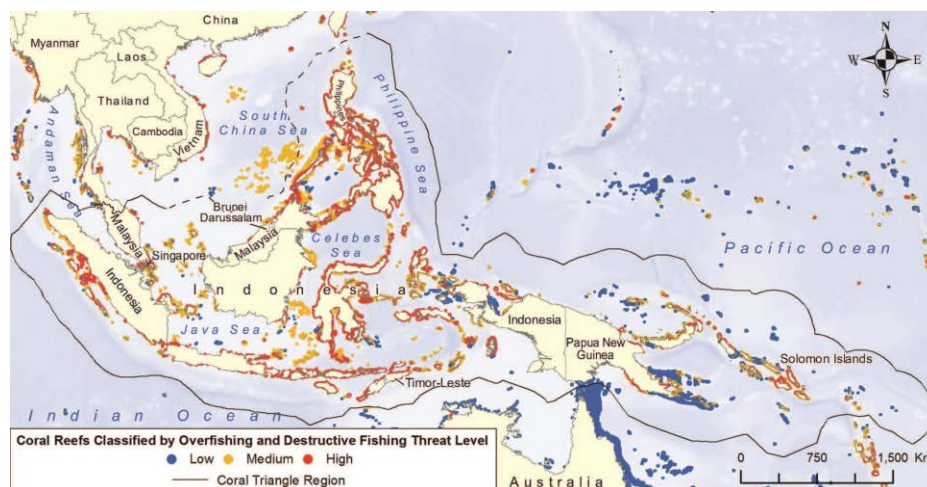


Figure 2. Reefs threatened by overfishing and destructive fishing in Coral Triangle Region
(Source: Burke et al., 2012, p. 18)

¹⁹. Arnason, R., Keller, K. The Sunken Billions: Economic Justification for Fisheries Reform. World Bank: Washington, DC, 2009, p. 19.

²⁰ GIWA, “Overfishing and Other Threats to Living Aquatic Resources”, Challenges to International Waters: Regional Assessments in a Global Perspective. UNEP: 2006.

43. Within the countries of the Coral Triangle Region²¹, over 114 million people live in coastal areas that are within a range of 30 km from a coral reef, which places very high pressures on fishery resources. Areas that are heavily fished have mostly small fish left, which disrupts the food chain in absence of larger herbivores that consume algae — and thus leaving smaller fish susceptible to algal overgrowth. Coral reefs that are overfished are hence more vulnerable to disease, less resilient to hazards and other human-induced impacts. The use of unsustainable fishing methods, such as explosives to kill fish (referred to as “blast fishing”), while illegal in many countries, is still a primary threat in the Coral Triangle as well as other EAS countries. Use of poisons is also common, mainly cyanide, which temporarily immobilizes fish for capture/ harvest. This practice is common in the live reef food fish (LRFF) and marine ornamental trade. The poisons also bleach corals and kill polyps. The breaking of corals by pounding, through a practice called “muro ami”, is used by fishers to gain access to “cryptic” species, which are more elusive fish which fetch higher prices in international markets. These forms of unsustainable fishing threaten nearly 85% of reefs in the Coral Triangle countries, of which 50% are considered highly threatened.²²

44. A related indicator of unsustainable fishing is the level of overcapacity. This is an added driver to the depletion of fish stocks and species diversity, which is pervasive in EAS countries. Recent data suggests a pattern of increasing catch and increasing fishing effort followed by a declining catch with a sustained effort, typical of an over-exploited population.²³ Declining catches force fishers to venture further at sea, for longer periods, in order to satisfy both household level as well as national food security needs.

Marine pollution from land-based and sea-based sources

45. Deteriorating water quality in coastal areas and LMEs is evident across the EAS region. Pollution from land-based sources, such as sewage, oil hydrocarbons, sediments, nutrients, pesticides, litter and marine debris and toxic wastes, enter waterways, river systems and the seas, and other runoff from land. These constitute a threat to coastal and marine ecosystems as well as to the health of coastal inhabitants by constraining the growth of phytoplankton growth, increasing fish mortality and benthos, reducing fishery yields, increasing eutrophication, increasing the occurrence of harmful algal blooms and intractable changes in ecosystem health.

46. The poor management of sewage, as the case in the EAS region where a large proportion of wastewater is untreated, largely contributes to the eutrophication of coastal waters. At the same time, infrastructure development, intensive agricultural expansion, urbanization and coastal development are also contributing to the increase in the flow of sediments and pollutants into the ocean, which is observed to be the most severe around many areas in the world, including east of China and in Southeast Asia.²⁴ In addition to agricultural run-off, solid waste and nutrients in upstream rural areas of rivers from livestock farming are common in the region that necessitates integrated approaches to address pollution in bay areas.

²¹ Philippines, Indonesia, Papua New Guinea, Solomon Islands, Malaysia and Timor-Leste

²² Burke, Lauretta, Kathleen Raytar, Mark Spalding and Allison Perry. *Reefs at Risk Revisited in the Coral Triangle*. World Resources Institute, 2012: pp 18-19. See Figure 2.

²³ http://wwf.panda.org/about_our_earth/about_freshwater/freshwater_problems/river_decline/10_rivers_risk/mekong_lancang/mekong_threats/

²⁴ Nellmann, C., S. Hain, and J. Alder, J. (Eds). February 2008. In *Dead Water – Merging of climate change with pollution, over-harvest, and infestations in the world’s fishing grounds*. United Nations Environment Programme, GROD-Arendal, Norway. www.grida.no.

47. The common belief has been that dealing with maritime pollution is too costly, that pollution prevention is too difficult to implement and impractical, and that negative environmental and social impacts can be dealt with in the future. Approaches to treatment of pollution cannot be singular in nature, for example the establishment of a wastewater treatment facility, only deals with one form of water pollution. This view has resulted in widespread dumping of hazardous materials into water systems. Hazardous industrial chemicals can be found in most major river systems. Many of these substances are persistent and can gradually accumulate in sediments, enter the food chain, affect water used for agriculture and drinking, and contaminating wildlife and entire ecosystems. The result can be long-term, intractable damage to people's health, ecology and broader economy. Hazardous substances often spread beyond river system boundaries and discharge into bays and seas, further affecting the coastal and marine environment.

Climate variation and change including extreme weather events

48. The coastlines of the East Asian Seas region are highly vulnerable to the effects of climate change due to the geology and geography of some of the river basins and coastal areas, the fast-rising population density and infrastructure build-up. Large tidal variations, tropical cyclones and increasing storm intensity and frequency, combined with increases in regional rainfall/run off, and ocean acidification, suggest the potential for increased coastal hazards. Sea-level rise and increases in sea-surface temperature (SST) are the major climate change-related stresses on these coastal ecosystems. Although SST analysis requires observations of long term data, there has generally been a warming trend in the region. Between 1982 and 2006, the East China Sea had the third highest SST recorded temperature increase of 1.22 C°. Eighteen of 64 LMEs around the world had temperature increases of two to four times the global average for this period.²⁵ Sea-level rise is the most apparent climate-related impact in coastal areas (as indicated above in relation to coastal erosion). Low-lying coastal plains which have high population densities and intensive agricultural and industrial use are particularly vulnerable to erosion, land loss, flooding and salt water intrusion. Especially at risk are the large deltaic regions of Viet Nam, Thailand, and the low-lying areas of Indonesia, the Philippines, and Malaysia.

49. During the 2009 typhoon season there were 20 recorded storms entering the Philippine area of responsibility, ten (10) of which were typhoons and three (3) were considered "super typhoons" (refer to Figure 3 on storm tracks). It was reported that more than 2,000 lives were lost, and local communities suffered damages in excess of USD 5.6 billion. Typhoon Ketsana (Ondoy) itself delivered 341 mm of rains in only six hours, which almost equalled the average monthly rainfall in Metropolitan Manila of 392 mm.²⁶ The same storm wreaked havoc across the East Asia and Pacific region, killing 674 people and causing damages of around USD 5.1 billion. In 2011 the combined earthquake and tsunami around Sendai, Japan resulted in 15,853 deaths and USD 201 billion in damages.²⁷ In Vietnam more than 70% of the population is estimated to be exposed to risks from such natural hazards as floods, hailstorms, cyclones, intense rainfall, etc. Besides recurrent impacts on human health, disasters affect multiple sectors, from agriculture to industries, from energy to education. Between 1990 and 2009 the country encountered an estimated annual economic loss equivalent to 1.3% of GDP or USD 3.85 billion.²⁸

²⁵ Sherman, K. And G. Mc Govern. Towards Recovery and Sustainability of the World's Large Marine Ecosystems During Climate Change. IUCN: Gland, Switzerland, 2011.

²⁶ PEMSEA EAS Congress WP/2010/10.

²⁷ Jha, Abhas K. and Zuzhana Stanton-Geddes (eds). Strong, Safe and Resilient: A Strategic Guide for Disaster Risk Management in East Asia and Pacific. World Bank: 2013.

²⁸ Oanh Luong Nhu, Nguyen Thi Thu Thuy, Ian Wilderspin and Miguel Coulier. "A Preliminary Analysis of Flood and Storm Disaster in Vietnam". ISDR: March 2011.

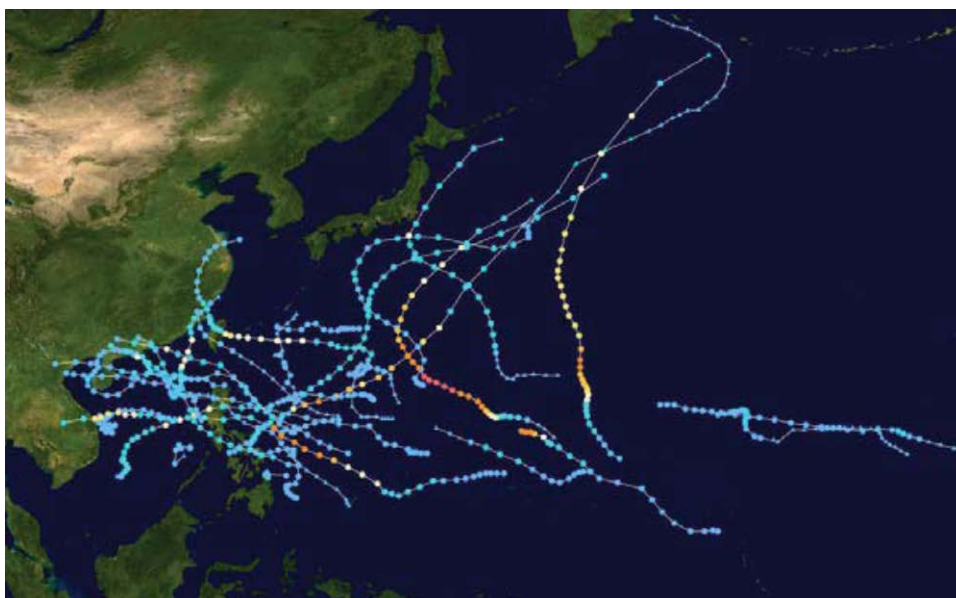


Figure 3. Storm tracks through East Asia (2009) source PEMSEA

50. Coral reefs are particularly susceptible to temperature stresses, with low adaptive capacity. Coral bleaching events are expected to increase as a result. In May, 2010 widespread coral bleaching events took place in Indonesia, Malaysia, Thailand, the Philippines, Maldives, and parts of east Africa. In Indonesia alone, the bleaching was severe in several parts of Sumatra and Sulawesi (up to 80% of susceptible corals species), with moderate severity in other areas including Bali, Java, Rajah Ampat, Lombok and Maluku.²⁹ Temperature variations also have an effect on fisheries yields. Such climatic factors affect the elements that influence the number and distribution of marine fish species by impacting on food availability, breeding habits, and the presence and species composition of competitors and predators. In addition, competing demands for land and water, and the loss of inshore fish nursery habitats to coastal development, may cause significant change to ecosystems and losses to commercial aquaculture. In the Yellow Sea climate change, combined with human-induced factors has contributed to serious declines in fish biodiversity, fish assemblage structure and negatively impacted the traditional fishing industry and food security in that area.³⁰

51. Combined with human-induced pressures (IPCC estimated coastal population of 5.2 billion by the 2080s), more and more people and assets will be at risk in coastal areas that are subject to land-use stresses and hydrological changes in catchment areas. Studies have projected the displacement of millions of people in coastal zones and billions of dollars in investments to build up adaptive capacity and infrastructure.

²⁹ <http://www.icriforum.org/news/2010/08/indonesia-global-mass-bleaching-coral-reefs-2010>

³⁰ Xiujuan Shan Pengfei Sun Xianshi Jin Xiansen Li and Fangqun Dai. "Long-Term Changes in Fish Assemblage Structure in the Yellow River Estuary Ecosystem, China" in *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science*, 5(1):65-78. 2013.

LONG-TERM SOLUTION AND BARRIERS TO ACHIEVING THE SOLUTION

Integrated Coastal Management (ICM) as the framework for SDS-SEA

52. Over half of the world's people live within 100 kilometres of coastal shorelines, with populations in these areas increasing at a rapid pace. The global economy is inextricably linked with the oceans and seas, with coastal areas providing a range of life-supporting ecosystem services. Countries in South East and East Asia are also connected in an ecological sense, through a number of large marine ecosystems (LMEs) which are fed by ocean and tidal currents which generate "upwelling zones and contribute to high productivity of the region."³¹

53. Due to the increased pressures from human settlements, urbanization and economic development activity, coastal areas are subject to multiple uses, which most often erode land and sea resources. Integrated coastal management (ICM) emerged as a paradigm to manage, regulate and coordinate activities in coastal areas, and to integrate the use of coastal resources with land use planning. The primary purpose of ICM is "to increase efficiency and effectiveness of coastal governance in terms of its ability to achieve the sustainable use of coastal resources and the services generated by the ecosystems in coastal areas. It aims to do this by protecting the functional integrity of these natural resource systems while allowing economic development to proceed."³²

54. ICM provides a common framework for sustainable coastal development (refer to Figure 4). It provides a governance system, and some issue-specific management systems which are important in achieving overarching goals of sustainable development, the objectives outlined in various international conventions, agreements and programs of action. ICM offers a set of practical tools and approaches to address the constraints to implementation of regional, sub-regional, national and local issues which are outlined in other sections of this document.

55. Applications of ICM help to set up the appropriate institutional arrangements to operationalize interagency and multi-sectoral coordinating mechanisms. This is done through stakeholder processes in planning, implementation, monitoring and evaluation, and continuous improvement of programmes in sustainable coastal development. The ICM framework is used to develop and implement national and local legislation which support new and existing policies, foster interagency and multi-sectoral institutional arrangements, land- and sea-use zoning schemes, registration and licensing, market-based/revenue generating instruments covering access and use of resources, monitoring and reporting, education, awareness creation, knowledge management, surveillance and enforcement mechanisms. These are all challenges faced by countries in trying to advance national and local policies, strategies and action plans in sustainable ocean and coastal governance.

³¹ Chua Thia-Eng. (with Danilo Bonga, Nancy Bermas-Atrigenio and Daisy Padayao). The Dynamics of Integrated Coastal Management: Practical Applications of Sustainable Coastal Development in Asia. PEMEA, Quezon City: 2006, p.9.

³² Ibid p. 14.

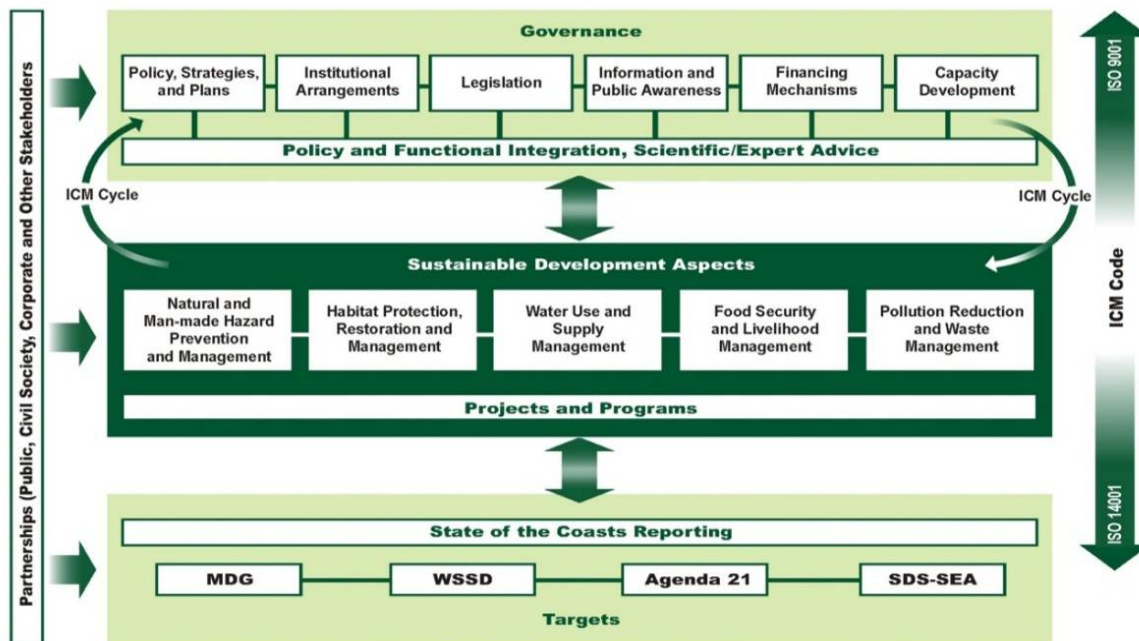


Figure 4. PEMSEA Framework for Sustainable Development of Coastal Areas

56. The ICM framework is instrumental in establishing sustainable financing mechanisms which support conservation of resources and required environmental infrastructure improvements through public- and market-based sources, such as appropriation of annual budget allocations; user fees, tariffs, taxes, penalties and fines; and adoption of a corporate management approach to utilities and resource management.

57. Applied ICM is used to reduce threats to sustainable management of coastal and marine areas, elaborated in the previous section. This includes those threats which impact on the regular supply of public goods and services generated through ecosystems, and are essential to coastal populations. ICM allows local governments and stakeholders to identify, define and analyze threats to sustainable coastal development, and put in place the appropriate management regimes to address these threats. There are five key management elements of relevance:

- a. **Natural and human-made disaster prevention and response management:** Increased frequency of natural and human-made disasters, including earthquakes, tsunamis, tidal storms, flooding, sea level rise, landslides, red tides, oil and chemical spills, coastal erosion and land reclamation, is now common in the region. ICM helps to identify and estimate likelihood of a disaster event, estimate the possible social, economic and environmental risks, the potential consequences, and the impact these might have on the lives and property of coastal populations, as well as ecosystem health. Applicable tools include: prevention and preparedness procedures and controls; contingency and emergency plans; public education and awareness building; training of response teams; access to adequate resources (equipment and materials, staff and financial resources); and humanitarian and emergency relief. Review of the national level SDS-SEA action plans suggests that these elements need to be integrated further.

- b. **Natural coastal habitat protection, restoration and management:** Habitat management initiatives, including increasing the vegetation coverage in metropolitan areas, can be developed and implemented to provide protection, conservation and restoration of natural environmental assets such as coral reefs, mangroves, sea grass beds, and other wetlands. These have been identified as priority concerns for development and management of marine protected areas. Moreover, these initiatives help strengthen capacity to address impacts of climate change, particularly as an adaptation and risk reduction measure to buffer against storm surges, among others. In this connection there is also some scope to advance opportunities for carbon sequestration (i.e. “blue carbon”).
- c. **Water use and supply management:** Well-conceived water resource management programs are important elements of a sustainable development strategy, particularly in metropolitan areas where water supply shortages occur more frequently. Instruments include sound water use policy, tariff systems, water allocation/licensing, water conservation and reuse, protection of water sources (i.e., watershed or river basins; surface and ground water), and ensuring the quality, adequate supply and accessibility of water services to common citizens.
- d. **Pollution and waste reduction management:** Among the critical challenges faced by cities and municipalities is the protection of land, air and water from various forms of waste and pollution, at sea or generated through land-based sources, which find their way into groundwater, rivers and coastal seas. Sustainable management programs include an understanding of the sources and characteristics of contaminants and waste materials entering the environment, what is required to change behaviours to reduce or eliminate pollution, and the types of policy reforms, legislation, capacity development, market-based procurement and management instruments, awareness building, incentives and enforcement mechanisms to address these threats.
- e. **Food security and livelihood management:** Sustainable fisheries, is both a target and an outcome of sustainable development. The fishing sector itself requires management and, in particular, the implementation of various codes of conduct. Activities in sustainable coastal and marine areas affect fisheries, and therefore a sustainable supply of fisheries can also be an outcome of good management of these other issues. It is also important to ensure the accessibility of the poor to fisheries resources, given its role as a major traditional source of animal protein for the coastal poor. Supplemental livelihood programs for coastal communities can also be set in place to reduce stresses on the fishery and to increase income and well-being from other forms of livelihood. Biodiversity conservation and sustainable use through development and effective management of conservation areas such as MPAs and MPA networks, can address these concerns directly.

58. The SDS-SEA has evolved through twenty years of practical experience in application of ICM in the context of the Seas of East Asia, primarily through project-based financing from the Global Environment Facility (GEF), implemented through the United Nations Development Programme (UNDP), along with assistance from other donors, national and local governments. In 2012, PEMSEA Country and Non-Country Partners adopted the SDS-SEA implementation Plan, which is characterized by:

- a. A more “inclusive” approach to involve government and other stakeholder partners

- b. Target-focussed actions plans, which would be achieved through regional consolidation (elaborated in the above discussion on “Regional Context”)
 - c. Use of a common platform for coastal and ocean governance to mobilize resources, and
 - d. Greater enabling of advocacy, monitoring and evaluation of progress and impacts.
59. Among its four broad-based targets referred to in the earlier section, Enabling Target 3 is critical, as it deals with ICM programs for sustainable development of coastal and marine areas and climate change adaptation covering at least 20% of the region’s coastline. A review of gaps and constraints in SDS-SEA implementation (national plans of member countries) up to 2011 highlighted five main actions to address perceived challenges:
- a. Need for continued efforts to reduce overlapping mandates, programming lapses, policy conflicts, competition and uneven management interventions among relevant government agencies
 - b. Need to reduce reliance on external funding and expertise, which suggests continued human capital development for local ICM managers
 - c. Need to continue experimental initiatives with sustainable financing, share lessons and experiences and scale up models within the context of a “regional knowledge platform”
 - d. Need to ensure that ICM is being applied “consistently and effectively as a process and management framework” in the design and execution of various activities, which include biodiversity conservation, climate change adaptation and disaster risk reduction and management, and
 - e. Local governments will need to take systematic efforts to measure progress towards targets using a common protocol and shared set of performance indicators as part of an overarching monitoring and reporting system.

Regional Barriers to Implementation of Long Term Solutions

60. The interactions between natural carbon, nitrogen and hydrogen cycles are exceedingly complex phenomena which scientists, researchers, practitioners, policy makers and communities at large are only beginning to fully understand. Long term solutions to transboundary coastal and marine issues need time to develop and eventually adopted, communicated, internalized and maintained within regional, sub-regional, national and local implementation frameworks. ICM offers a framework for development and implementation of solutions. While the EAS countries have made remarkable progress in the implementation of the SDS-SEA, manifold challenges remain.

61. At the regional level, PEMSEA is in the process of transforming into a self-reliant and dynamic international organization that is relevant, effective and responsive to regional and national priorities and needs. It is in the process of re-engineering its financial sustainability and communications plans, as approved by the EAS Partnership Council in 2011. As an international organization, it is in its nascent stages, focussing on a mandate which features implementation of the SDS-SEA plans, capacity development and knowledge management. PEMSEA needs to continue its partnership approach in order to mobilize Country and Non-Country Partners, as well as donors and financial institutions, to invest in a sustainable “blue economy” for the EAS region. PEMSEA also needs to work closely with educational institutions, Regional Centers of Excellence, ICM Learning

Centers, in order to build up a critical mass of broad-based, trained and educated coastal and ocean managers to undertake the enormous tasks in the region.

63. The regional partnership and its associated governance instruments and processes (as outlined in Figure 5) will need continual strengthening to include all countries, as well as other stakeholders, joining in the shared vision, mission, goals and objectives of PEMSEA, as Partners. It will require increased levels of participation, as the self-sustaining mandate of PEMSEA as a regional mechanism will require a sense of country-ownership, including expanded cost sharing of agreed programs, projects and capacity development initiatives. Commitments from some countries shift from time to time, depending on their own unique circumstances, national priorities and dynamics. As such, continued efforts are required to demonstrate the benefits of the regional partnership. The continued role of platform framework programs of the World Bank/GEF and UNDP/GEF, among other donors and agencies, are critical in this regard, to ensure that the forward momentum is maintained.

Figure 5. PEMSEA Regional Coordinating Mechanism Organizational Chart

men to be killed. When disasters occur, poor households, particularly in coastal areas, are pushed further into poverty.

Table 6. Impact of Natural Disasters of East Asian Countries in Past 30 Years³³

Country	People killed	People affected	Estimated damages (in USD ‘000s)
Cambodia	1,426	18,319,666	1,057,110
China	154,602	2,974,972,174	356,292,317
Indonesia	188,610	21,686,240	14,356,527
Lao PDR	207	5,465,868	429,779
Philippines	34,383	129,556,382	8,194,581
Thailand	12,781	80,795,502	46,671,747
Timor-Leste	5	13,571	0
Vietnam	15,689	74,944,401	8,629,252
Totals	407,703	3,305,753,804	435,631,313

65. East Asian and other Pacific nations are exposed to large fiscal impacts on their public expenditures, as Table 6 indicates. Cambodia, Lao PDR, the Philippines and Vietnam should expect to face considerable annual average losses relative to the size of their economies. Cambodia, Lao PDR, and the Philippines could face costs of 18 percent or more of total public expenditure in the event of a “once-every-200-year” disaster. Disasters inflict extreme financial and fiscal impacts on East Asian economies. Governments are required to take on increasing financial responsibilities for post-disaster recovery and reconstruction. Institutions with regional mandates in the EAS have inadequate and/or incomplete funding arrangements in place for major disasters, which can augment the adverse socioeconomic consequences of these occurrences. There is uneven capacity and there are uneven resources at the national levels for the EAS region to adequately coordinate local, national and regional level disaster risk financing, while simultaneously protecting long term fiscal balances, and reducing contingent liability to disasters through a number of measures that will strengthen financial resilience.³⁴

66. In relation to the above, it has been observed that in East Asia and the Pacific, too often land-use/sea-use plans are developed separately from risk reduction strategies. Development programs and projects can sometimes create new types of vulnerability or increase existing ones. A classic example is the common failure to integrate disaster resiliency into building codes, or to build dams to meet energy requirements without complete analysis of the longer term impacts on river basins and coastal areas. Most of the current disaster management systems in place are responsive in nature, while not enough investments are flowing into prevention. This creates an “overreliance” on post-disaster assistance, and puts up serious challenges for mainstreaming of DRR into ocean and coastal policy frameworks. Mainstreaming is constrained by a number of factors, including weak engagement by the sectoral agencies, limited authority of national disaster management organizations to encourage sectors to include risk reduction measures, ineffective legal frameworks, limited funding and weak implementation capacity and absence of accountability measures. Countries need to balance hard engineering solutions with softer policy, planning and institutional development approaches³⁵, and essentially, make smarter investments based on a balanced and thorough assessment of options.

³³ Adapted from Jha and Stanton-Geddes, *op.cit.* p 14.

³⁴ Jha and Stanton-Geddes, 2013.

³⁵ *Ibid* pp. 65-67.

National and Local Barriers to Long Term Implementation

67. During consultative processes with national counterparts and stakeholders concerning SDS-SEA implementation, gaps and barriers in policy, institutional and individual capacities were analyzed. At the national and local levels, a number of common challenges impede the realization of the SDS-SEA, as well as the ultimate goal of a sustainable ocean-based blue economy. These include:

- a. Lack of intersectoral, inter-regional and interagency coordinating mechanisms
- b. National coastal and ocean policies and strategies are not yet in place, or are not fully understood and promoted across sectoral agencies and programs at the central level, and sub-nationally, resulting in continuing misalignment, conflict and duplication of effort
- c. Limited knowledge and awareness of the value of coastal and marine ecosystems services and the consequences of degradation or loss of such services
- d. Inadequate capacity to enforce regulations
- e. Insufficient mechanisms and incentives to engage local governments and the business/private sector in investments in conservation and pollution reduction projects
- f. Limited access to human resource development opportunities, including education and training, especially at local levels
- g. Inadequate resources and capacity for scientifically sound environmental monitoring and lack of coordination/integration of environmental monitoring efforts among sectoral agencies, programs and projects
- h. Inadequate funding and capacity for applied research on social, ecological and economic values of coastal and marine ecosystem services and their contribution to sustainable development and security, and
- i. Limited sharing of knowledge on good practices, lessons and case studies within countries across the region.

These challenges vary in nature and degree across the countries, each of which has a unique set of dynamics and constraining factors to address. **Annex D** provides more detailed information on current barriers, constraints and challenges faced by each country, based on ongoing and recent reviews and national / local stakeholder consultations.

PROTECTED AREA COVERAGE AND STATUS

68. Summary data for KBAs, MPAs and ICM in selected countries are presented in the Table 7. The two main criteria for defining a KBA are “vulnerability” and “irreplaceability”, which are supported by sub-criteria and data on thresholds. These can be considered a starting point for gap analyses and conservation initiatives at local, national and regional levels. It is important to note that conservation activities can begin even before a KBA is identified. Priority areas such as Important Bird Areas (IBAs), Alliance for Zero Extinction (AZE) sites, and Wetland of International

Importance (RAMSAR) sites are, in effect, subsets of the KBAs. Countries need to follow the KBA identification and delineation process so that other groups of species which are not part of the above taxonomic process can be identified and prioritized for conservation. The Philippines, for example, has completed the KBA identification and delineation process by identifying sites of terrestrial and marine species such as corals, molluscs, elasmobranchs, reef fishes, amphibians, reptiles, birds, and mammals, that are critical for conservation.³⁶ By using this methodology, and integrating biodiversity conservation and sustainable use within the ICM framework, countries will be in a better position to achieve Aichi Biodiversity targets under the Convention for Biological Diversity (CBD).³⁷

Table 7. Summary data on KBAs, MPAs and ICM in selected EAS countries

Country	KBAs						MPAs			ICM	
	Number of Protected KBAs	Number of Partially Protected KBAs	Number of Unprotected KBAs	Number of Marine KBAs out of Total	Number of KBAs as both Terrestrial and Marine out of Total	Total	Number of MPAs	Total hectares	% of Total marine area covered by MPAs	Length of Coastline with ICM programs (km)	% of National Coastline
Brunei	4	1	2	0	2	7	7	1.83	1.40	TBD	TBD
Cambodia	18	6	16	0	6	40	2	19.23		140.50	32
China							29	40.48		3,844.55	12.1
DPR Korea										127	4.41
Indonesia	105	29	108	0	0	242	119	875.44	2.00	3,047.46	3.2
Japan							108	109.08		TBD	TBD
Lao PDR	15	4	8	0	0	27				N/A	N/A
Malaysia	26	10	25	0	4	61	143	122.08	2.00	156	3.06
Myanmar	18	3	35	0	0	56	6	12.51	0.31	TBD	TBD
Philippines	50	41	137	77	50	228	202	165.23	2.50	6,384	17.6
RO Korea							6	33.89		11, 915	88.2
Singapore	1	0	2	0	1		3	0.11	1.40	182.40	100
Thailand	44	9	11	5	7	64	19	61.61	4.40	171.78	5.46
Timor Leste							1	12.36		142	19.3
Vietnam	31	2	28	0	0	61	39	27.00	1.71	1,189	36

Source: WDPA; www.mpaglobal.org; PEMSEA

69. As the definition of a MPA has not been applied evenly across countries, it should be noted that sources of data vary depending on the country, the purpose of the protected area, and institution collecting data. For example the North East Asia Regional Programme for Environmental Cooperation (NEASPEC), has recently presented the data for selected countries (Table 8).

³⁶ ASEAN Centre for Biodiversity. *Protected Areas Gap Analysis for the ASEAN Region*. Los Baños: 2010.

³⁷ www.cbd.int

Table 8. Number and Area of MPAs in Selected NE Asian Countries

	Country	Total	Level			Protection Type		
			National	Provincial	Municipal / County	Natural Ecosystem	Wild Animals/ Plants	Nature Heritage
Number	China	20	9	5	6	15	17	17
	Japan	23	23	0	0	23	23	19
	ROK	22	22	0	0	22	20	13
	Total	65	54	5	6	60	60	49
Area (ha)	China	1,367,206	1,150,525	194,149	22,532	1,355,210	1,343,716	1,359,955
	Japan	436,235	436,235	0	0	436,235	436,235	421,000
	ROK	357,333	357,333	0	0	357,333	353,710	333,718
	Total	2,160,774	1,944,093	194,149	22,532	2,148,778	2,133,661	2,114,673

Source: NEASPEC, 2012.

70. Of the 789 KBAs identified in the ASEAN³⁸ region, only 82 (10 percent) are located in the marine realm. These include 10 KBAs that are protected, eight partially protected and 64 unprotected. In addition, there are 70 KBAs that cover both terrestrial and marine areas: 25 are protected, 12 partially protected and 33 unprotected. “Marine habitats and ecosystems are severely under-represented in the identification of KBAs”.³⁹ For those that are protected, “management concerns remain to be an issue”. There has been an increase in the proportion of MPA areas within the territorial waters of ASEAN Member States, with average annual growth of 5% between 1999 and 2000, and modest increases of 0.5% since then up to 2009. There have been notable declines in the quality and quantity of mangrove, sea grass and coral reef habitats. Mangrove forests declined at a rate of 1.06% between 1980 and 2005, while protection of existing mangrove forests needs to be stepped up to address the negative impacts of species extinction, reduced fisheries production, increased incidence of mangrove cuttings. Coral reefs and sea grasses are also experiencing increased threats through habitat change, the impact of climate change, over-exploitation, and pollution (as discussed above).

71. For sea grasses, the aggregate protection areas fell under the 10 percent target at 8.33 percent protection, while Thailand and Indonesia surpassed the 10-percent target at 35% and 17%, respectively. Cambodia, the Philippines and Viet Nam did not achieve the 10% mark. There is a need to expand communications related to economic values of sea grasses in the region to increase appreciation and conservation efforts for this ecosystem. Sea grasses provide a nursery function for various fishes and invertebrate larvae, and make this ecosystem a key resource for inclusion in MPA planning and implementation frameworks. For coral reefs, about 14 % of the coral reef areas are protected, hence achieving the CBD target. Thailand, Indonesia and Vietnam, demonstrated a high degree of conservation rigour in their coral reef protection activities, while in Brunei Darussalam, Cambodia, Malaysia, Myanmar and the Philippines, “protection activities remain to be a challenge”.⁴⁰

STAKEHOLDER ANALYSIS

³⁸ This includes Indonesia, Philippines, Thailand, Malaysia, Singapore, Brunei, Myanmar, Cambodia, Laos PDR and Vietnam

³⁹ ASEAN Centre for Biodiversity. *ASEAN Biodiversity Outlook*. Philippines, 2010.

⁴⁰ Ibid.

72. Stakeholder inclusion and participation is the principal strength of the ICM approach. 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:

- a. regional level, including regional intergovernmental organizations, and donor and financing agencies;
- b. national level, including national ministries, departments and agencies covering natural resources and environment, agriculture, fisheries, health, education, transportation, energy, tourism, industry, foreign affairs, economic development, and finance; and
- c. local level, including village/township, municipalities, city, district and provincial governments and their respective national/central government counterparts.

73. In addition to the government related stakeholders, the GEF project will engage directly with:

- a. international and national non-government organizations (NGOs) working in specialized fields (e.g., microfinance, ecotourism, women's issues, sustainable fisheries, etc.);
- b. academic, research, scientific and technical institutions (e.g., universities, polytechnics, specialized training institutes);
- c. national and local law enforcement agencies (e.g., maritime police, coast guard, etc.) and legal support organizations (e.g., Wildlife Enforcement Network);
- d. professional associations, scientific and technical societies;
- e. business support organizations (e.g., chambers of commerce, financial institutions, industry associations); and
- f. individual corporations (e.g., for CSR-related investments).

74. The GEF project will offer a range of mechanisms, forums, platforms, networks and opportunities for stakeholder engagement, inclusion and participation. These include, but are not limited to:

- a. Representation on EAS Partnership Council
- b. Ministerial Forums, EAS Congress and other special events/exhibitions
- c. National Coordinating Committees
- d. Technical Working Groups
- e. Policy forums
- f. Expert/scientific advisory groups
- g. Collaborative/joint initiatives and sub-projects
- h. PEMSEA Network of Local Governments (PNLG)

- i. Network of ICM Learning Centers
 - j. Regional Centers of Excellence
 - k. Regional and national task forces
 - l. Corporate Social Responsibility Network
 - m. Other Communities of Practice.
75. Stakeholder engagement and involvement will be a continuous process, as the project seeks to:
- a. resolve/mitigate trans-boundary and resource use issues and conflicts;
 - b. overcome barriers and constraints to improving inter-agency and multi-sectoral collaboration and coordination;
 - c. develop and coordinate regional, national and local level initiatives;
 - d. formulate and implement national and local policies and laws related to ocean and coastal governance;
 - e. formulate and implement national policies and legislation in support of sustainable development coastal and marine areas;
 - f. address specific sets of cross-cutting concerns and issues (e.g., gender, environmental and social screening);
 - g. leverage partnerships and collaborative approaches to implement ICM;
 - h. ensure complementarities and mutual reinforcement of programs and projects with other funding agencies;
 - i. encourage and strengthen investments in ICM-related programs and projects, including habitat restoration, pollution reduction, waste management, etc.; and
 - j. promote sharing of knowledge and good practices in support of scaling up of ICM and IRBCAM.

76. Part IV of this document provides a more detailed presentation of proposed stakeholder involvement, and **Annex E** presents supporting information on the stakeholder inclusion / consultation processes, which have led to the updated 5 year SDS-SEA national implementation plans, PIF, and the formulation of the Project Document.

BASELINE ANALYSIS

77. The East Asian region is composed of countries and economies spanning the spectrum of the rich and industrialized, middle income, lesser developed, and in the case of Timor Leste, an emerging

nation. This disparity translates to wide variations in capability in the technical and financial sense. Without impartial external support, such disparities would remain as major barriers to the objectives and targets of the SDS-SEA. 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 in planning, development and sustainable use of marine and coastal resources will be a conscious goal, with the objective of bringing all the member countries into more level platform during periods subsequent to the project.

78. Despite efforts taken in advancing ICM as a holistic, governance-enriched framework, and improving capacity for sustainable development of coastal and marine areas, implementation of the SDS-SEA still faces many challenges. Without demonstration of tangible benefits in terms of links to economic growth and creation of income opportunities and jobs, political interest and support tends to fade, and arguments for increased levels of public expenditure are difficult to mount against other, competing sectors of national and local economies. The continuing focus on economic development and competition over limited natural resources has exacerbated national and regional security concerns, and increased trans-boundary political, social, economic, cultural and environmental risks. In the absence of a regional coordinating mechanism, there would be no venue, forum or reference framework within which countries can establish a continuing dialogue and collaborative approaches to sustainable development. The permanence of such a neutral mechanism, through legal personality, lends credibility and confidence between and among key players. No other such intergovernmental body exists that can provide the technical coverage or range of support that is required to address the manifold issues of the East Asian Seas.

79. The renewed focus on the “blue economy”, proven models, tools and methods, some innovative ways to quantify the economic values of ecosystems services, a number of success stories, and related progress in the SDS-SEA implementation lend support to the credibility of ICM. However, without a regular, central, coordinating and technical oversight body, there will likely be a tendency for *backsliding*, or a reversion to practices that are exploitative or destructive to the coastal and marine environment. This may have an eventual negative impact on economic growth and prosperity of some of the middle income or lesser developed economies.

80. While the majority of countries are on the path to developing national ocean and coastal policies and legislation, there continue to be gaps in implementation capacity, particularly at local levels. Moreover, more work is needed to coordinate ICM with other, sector-based agencies in order to reduce or minimize conflicts and duplication. The impacts of climate variability and change are increasingly felt around the region, and with emerging models, scientific knowledge, technologies and tools that are increasing our understanding of these complex phenomena. Countries need to address these types of natural occurrences within a comprehensive, strategic regional framework, since these are shared problems that require shared responses and solutions.

81. This project builds upon the foundation established in the region over the past 20 years of GEF support to participating countries, as discussed in paragraphs 5 through 29 of Part 1. The ownership and commitment that has developed among countries and their partners is clearly evident in terms of the co-financing support...more than USD150, 000,000. The focus of the co-financing commitments from the national and local levels is the investment in developing and implementing their respective national SDS-SEA/ICM plans, including putting in place the necessary governance

mechanisms and capacities to achieve national targets for scaling up ICM programs (i.e., Components 1 and 2 of the project), thereby addressing national sustainable development priorities, while contributing to global and regional commitments for protection, restoration and sustainable use of coastal and marine resources. Non-country partners in the project, including UNDP, UNEP NOWPAP and MERIT have identified the strengthening of coordination among regional and sub regional ocean governance mechanisms as a key focus of co-financing contributions (Component 1) as well as building and strengthening on-the –ground capacities in ICM and knowledge sharing among project, programs and research institutions (Components 2 and 3).

PART II: STRATEGY

PROJECT RATIONALE AND POLICY CONFORMITY

Fit with the GEF Focal Area Strategy and Strategic Programme

82. The project is consistent with the GEF 5 Focal Area Strategies, in particular the International Waters Strategy Objectives 2 and 3 and their respective outcomes, namely:

IW Objective 2: Catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and large marine ecosystems while considering climatic variability and change

Outcome 2.1: Implementation of agreed Strategic Action Programmes (SAPs) incorporates ecosystem-based approaches to management of LMEs, ICM principles, and policy/legal/institutional reforms into national/local plans;

Outcome 2.2: Institutions for joint ecosystem-based and adaptive management for LMEs and local ICM frameworks demonstrate sustainability;

Outcome 2.3: Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results

IW Objective 3: Support foundational capacity building, portfolio learning, and targeted research needs for ecosystem-based joint management of trans-boundary water systems.

Outcome 3.3: IW portfolio capacity and performance enhanced from active learning/KM/experience sharing (IWLearn)

Outcome 3.4: Targeted Research Networks fill gaps

83. The project seeks to demonstrate local-to-global benefits through scaled-up national ICM programs that cover:

- a. The protection and sustainability of coastal and marine ecosystem services
- b. Climate change adaptation and enhanced resilience in the coastal zone
- c. Sustainable fisheries and alternative livelihoods; and
- d. Water conservation and use management/pollution reduction.

84. Specifically, Component 1 will focus on establishing, aligning and strengthening local and national policies and legislation on ocean and coastal governance, as well as integrated river basin and water use/management and integrating these with medium term development plans. Collaborative planning, consensus-building and a number of other initiatives will be supported to this end. Component 2 will be implemented primarily at local/site levels, at a number of locations provisionally identified through national stakeholder consultative processes. It will feature practical, technical interventions using ICM/IRBCAM tools, methods and approaches to reduce threats to ecosystems services in coastal and marine areas. Policy, institutional and legal reforms and initiatives,

combined with strategic partnerships, will contribute to targets for recovering and sustaining fisheries, among other things. Habitat restoration, preservation and management actions, such as effective and climate smart, marine protected areas, fisheries governance, support to alternative and sustainable livelihoods will reduce stresses on ecosystems and fish stocks. Integrated river basin and coastal area management (IBRCAM) initiatives will reduce land-based discharges which contribute to pollution and improve efficiency in water use and conservation quality to produce healthier and more resilient ecosystems.

85. Component 3 will address targets related to IW Objective 3, by focussing on active learning, experience sharing and knowledge management in the GEF IW portfolio in the EAS region. It will also support targeted research and networks to fill scientific and knowledge gaps. It is expected that availability of, and access to, credible scientific and technical knowledge and information will drive political commitments to contribute to prevention of further depletion or degradation of coastal and marine resources.

86. The project fits within the approved GEF/UNDP program entitled, “Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments”. It will provide the vehicle for facilitating and channelling collaborative planning, learning experiences and good practices in sustainable development of marine and coastal areas, reducing the impacts of climate variability and change, and building an ocean-based blue economy through scientifically sound investments at the national and local levels. It further harmonizes the planned outcomes with two other LME and sub regional sea-based projects identified under the GEF/UNDP program, namely: the Implementation of the Yellow Sea LME Strategic Action Programme for Adaptive Ecosystem-Based Management; and Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas.

87. The project also complements the five investment and knowledge sharing projects implemented under the approved WB/GEF program on Scaling Up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts, as well as other related GEF, UNDP and World Bank projects in the East Asian Seas and Western/Central Pacific regions.

Rationale and summary of GEF Alternative

88. In the baseline scenario, since the adoption of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) in 2003, East Asian countries have made meaningful progress towards the goals set in the 1992 Earth Summit on Environment and Development (Rio Declarations), especially those detailed in Chapter 17 of Agenda 21 covering oceans and coasts, the Millennium Development Goals and the Johannesburg Plan of Implementation of the World Summit for Sustainable Development. With the support of GEF, UNDP, IMO, the World Bank and various other donors, significant milestones have been achieved, as follows:

- a. PEMSEA was established and developed into a country-supported, international organization with its own legal personality, focused on coastal and ocean governance
- b. PEMSEA countries have targeted the development and implementation of national coastal and ocean policies. Thus far, 9 countries (Cambodia, China, Indonesia, Japan, Philippines, RO Korea, Singapore, Thailand and Vietnam) have initiated the development or put in place national coastal and ocean policy; at least 80 pieces of legislation directly supporting the implementation of the SDS-SEA have been enacted by participating countries

- c. PEMSEA countries have targeted ICM coverage of 20 percent of the region's coastline by 2015. To date, more than 31 ICM sites have been operationalized in 12 countries, covering 27,299.69 km of coastline (almost 12% percent of the total coastline) and 331,546 km² of watershed areas, affecting the lives and properties of more than 150 million people
- d. PEMSEA's Network of Local Governments Implementing Integrated Coastal Management (PNLG) has been established. It is the only local government network in the world that has adopted standardized ICM approaches and catalyzed cooperation of all stakeholders (policymakers, private sectors, scientific and education institutions and communities) to address challenges to sustainable development coastal communities and resources, and
- e. Various innovative products and services have been developed, tested and applied at ICM sites to strengthen management programs, including a State of Coasts (SOC) reporting to define progress, achievements, trends and impacts of ICM programs over time.

89. However, despite these efforts and initiatives, participating countries have recognized that the advancement towards the vision and objectives of the SDS-SEA has been modest considering long-standing and emerging barriers, including: a) biodiversity loss and the destruction and degradation of coral reefs, mangroves, fisheries and other natural resources; b) pollution of rivers and coastal sea areas from land- and sea-based sources; c) the impacts of climate change and severe weather events on people, coastal and marine resources, livelihoods and properties; and d) nutrient over-enrichment and the increase in "dead zones" in coastal waters of the region.

90. Policy and market failures continue to weaken the foundation for sustainable development in the region. Outdated management policies are unable to provide the needed policy support for social, economic and environmental sustainability. Some obsolete subsidy policies, such as those for fishing fleets and for agricultural fertilizers, have proven to be counterproductive. Not only do they disrupt normal market functions, but they are also unable to provide long-term benefits to the fisherfolks and farmers, respectively.

91. On the other hand, lack of or insufficient policy support to provide economic incentives for environmental improvements, including pollution abatement, habitat restoration, and establishment of nature reserves and marine protected areas, has diminished the level and halted the rate of environmental protection and improvements. Consequently, it has also stymied the development of a blue economy. Ineffective integration of sectoral policies and agency functions has often resulted in interagency conflicts, which slow down environmental and conservation efforts.

92. Inadequate and inefficient institutional arrangements in terms of appropriate legislation, enforcement and interagency coordination have also slowed down the process for sustainable development of the region's coastal areas. The prevalent deficiency is pertinent legislation to strengthen coastal governance and integrated management, and this has hindered management efforts to meet the necessary changes arising from rapid economic development in the coastal areas. Poor enforcement of existing environmental legislation further undermines management actions. With increasing coastal management complexity, the absence of an effective interagency coordinating mechanism makes it doubly exigent to reduce interagency conflicts and to harmonize interagency collaboration.

93. Insufficient financing to support environmental protection or environment improvements continues to be the main reason for lack of or insufficient government actions. This is partly due not only to the lack of innovative environmental investment approaches, but mainly because of the conventional reliance on government budgetary allocation. Efforts are needed to explore new

opportunities for soliciting environmental financing, sourcing market incentives for a blue economy and effective use of private corporations through public-private sector partnerships. Sustainable financing measures require a change or modification of policy direction on the part of the local and national governments, as well as perception change on the part of government officials.

94. Lack of individual and institutional capacity at local and national levels to plan and manage coastal and marine resources in a sustainable manner continues to deter the implementation of integrated coastal and marine management initiatives. The problem of inadequate local skills to plan and sustainably manage coastal and marine areas needs to be resolved before any significant progress in sustainable coastal and marine area development can be expected. Likewise, the institutional capacity of concerned local agencies in coastal governance needs to be upgraded for them to work and cooperate effectively in implementing common coastal management programs.

95. Insufficient public support and buy-ins from stakeholders continue to be the impediment for scaling up sustainable coastal development programs. Efforts in public awareness campaigns regarding sustainable coastal development, especially on biodiversity conservation, need to be intensified to create an informed public who has already internalized environmental conservation as a means to achieve better economic future, thus creating the necessary public support or pressure for change. Stakeholders' buy-ins of environmental improvement projects or sustainable development programs particularly at the local level need to be ensured and strengthened to reduce influence from political and sectoral interests.

96. Lack of scientific support and advice in decision making continues to occur partly because of the inadequate access to scientific advice and partly because of the scientists' difficulty to provide firm scientific opinions on critical environmental issues due to knowledge gaps and scientific uncertainties. This has resulted in the inability of decision makers to rely on scientific input to management decisions. While the Environmental Impact Assessment (EIA) has become a common requirement for the approval of new development projects, there are doubts over the quality and even credibility of many EIA reports and their effectiveness especially with respect to compliance.

97. The proposed GEF alternative scenario will see support for objectives of the GEF/UNDP Program Framework for Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Implementation of Intergovernmental Agreements and Catalyzed Investments for Scaling up Investment Partnerships in East Asian Seas. The project will take a collaborative approach for resolving the issues outlined in the sections above, working directly with regional, sub regional and national institutions and local governments to deliver the policies, legislation, learning experiences, knowledge products and on-the-ground results in protecting and sustaining coastal and marine ecosystem services, and achieving ocean-based blue economies. The nature of GEF assistance is described in the paragraphs below.

INTRODUCTION TO PROJECT SITE INTERVENTIONS

98. In addition to strengthening local, national and regional governance in ICM, this proposed GEF project will focus on scaling up of the SDS-SEA with increased emphasis on local, site-based implementation. The strategy will be to work directly with "priority sites", and where possible and relevant, include "replication sites" for purposes of transfer of good practices and sharing of knowledge. The table below provides summary information on the number of priority and replication sites. It is important to note some priority sites will "integrate" more than one ICM related

intervention (e.g., for example, MPA development + fisheries management; or habitat restoration + pollution reduction, etc.), while others represent clusters or networks.

99. The following section on Project Strategy provides more detailed information on the specific location of the priority sites and the nature of the project intervention in response to perceived threats. **Annex F** contains summary data per priority ICM site, including demographic, institutional, socio-economic, biophysical information, among others. More detailed site profiles are being prepared and will be reviewed by stakeholders during project inception.

Table 9. Number of priority and replication sites under GEF project

Country	Priority Sites	Replication Sites
Cambodia	4	14
	Ports = 2	
China	10	>25
Indonesia	6	>12
	Ports = 1	Ports = 1
Laos PDR	3	
Philippines	12 ⁴¹	5
	Ports = 2	Ports = 1
Thailand	4	3
	Ports = 2	
Timor Leste	3	1
	Ports = 1	
Vietnam	8	3
	Ports = 2	
Sub-regional	1 (Cambodia, Vietnam, Thailand)	
Total	51	>63
	Ports = 10	Ports = 2

PROJECT GOAL, OBJECTIVE, OUTCOMES AND OUTPUTS/ACTIVITIES

100. The **project goal** is to reduce pollution and rebuild degraded marine resources in the East Asian Seas through implementation of intergovernmental agreements and catalyzed investments.

101. The **project objective** is to catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based blue economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA).

102. In order to achieve the above objective, and based on a barrier analysis (see Section I, Part I), which identified: a) the problems being addressed by the project, b) its root causes, and c) the barriers that need to overcome to actually address the problem and its root causes, the project's intervention has been organised in three components (also in line with the concept presented at PIF stage), under which eleven 'outcomes' are expected from the project, which is structured according to three main component areas:

⁴¹ Includes existing sites in Manila Bay, Batangas Province and Guimaras Province

Component 1:	Partnerships in Coastal and Ocean Governance
Component 2:	Healthy and Resilient Marine and Coastal Ecosystems
Component 3:	Knowledge Platform for Building a Sustainable Ocean-Based Blue Economy

103. Component 1: Partnerships in Coastal and Ocean Governance, will focus on:

- a. organizing and conducting consultations, awareness building and collaborative planning forums at the national and local levels involving decision-makers, planners, public and private sector stakeholders and coastal communities;
- b. improving understanding and building consensus on the importance of coastal and ocean policy;
- c. promoting the integration of relevant targets into medium term development plans and regulatory frameworks, including policy/regulations aimed at reducing vulnerability of coastal communities and resources to climate change and severe weather conditions; and
- d. delineating and initiating programs at the national and local levels to transform policy into actions and investments.

104. The GEF funding will be utilized for two purposes, namely: to share/promote good practices in ocean policy development and implementation at the national and local levels through technical assistance; and to facilitate the establishment of PEMSEA and the SDS-SEA as the regional mechanism and platform for improved coordination of ocean governance and management across LMEs and coastal waters of the region. To this end, the GEF funding will support activities aimed at coordinating, monitoring and reporting project and activities related to the UNDP EAS Program Framework to stakeholders across the region. This will entail developing and initiating partnership agreements and working arrangements between PEMSEA and the Yellow Sea Large Marine Ecosystem (YSLME's Yellow Sea Commission) and the Western and Central Pacific Fisheries Commission (WCPFC), and other sub-regional seas projects and programs (e.g., COBSEA; Arafura-Timor Seas, Coral Triangle, etc.) including developing and adopting financial mechanisms to sustain program operations. In addition, a regional State of the Ocean and Coasts (SOC) reporting system will be developed, tested and applied during the course of the project, building on the foundation of existing monitoring and reporting systems within the region and globally. The regional SOC report will include the three projects under the UNDP EAS Framework Program (i.e., PEMSEA, YSLME; WCPFC), as well as inputs from countries and other sub regional/regional projects and programs.

105. Component 2: Healthy and Resilient Marine and Coastal Ecosystems aims to help participating countries achieve the 20% ICM target, by identifying priority coastal and watershed areas and major challenges to rehabilitating and/or sustaining coastal and marine ecosystems. It will use the ICM approach to strengthen local governance of and services provided by coastal and marine areas and resources and build partnerships to leverage apply skills, technologies tools, and leverage investments in on-the-ground interventions. The project will focus on:

- a. habitat conservation and management in biodiversity hotspots, including improvement in the management effectiveness of new and existing MPAs and MPA networks;

- b. sustainable fisheries management in threatened fishing grounds, including strengthening local applications of marine spatial planning, ecosystem-based approaches to fisheries management, and supplemental livelihood opportunities for fishers;
- c. pollution reduction in priority river basins and coastal areas through the application of total allowable pollutant loading and the preparation and promotion of good practices and investments in efficient use of fertilizers as well as reductions in priority pollutants from domestic, industrial and agricultural sources;
- d. building resilience to climate change and other natural and manmade hazards in vulnerable coastal communities through vulnerability assessments, disaster risk reduction and preparedness at the community level and investments in hard and soft engineering solutions to natural and manmade hazards; and
- e. demonstrating innovative financial and economic instruments and other incentives designed to drive positive changes in behavior at ICM sites (e.g., revolving funds, Public Private Partnerships (PPPs), Payment for Environmental Services (PES), markets for carbon credits, Corporate Social responsibility (CSR) and certification programs (e.g., Port Safety, Health and Environmental Management Code; ICM Code).

106. The GEF funding assistance will be used to help build and implement governance and management improvements at the local level and to leverage required investments in rehabilitating and sustaining healthy and resilient coastal and marine ecosystems. ICM brings global, regional and national benefits and will contribute to relevant objectives and targets, and introduce a number of innovative technologies and measures to the local level. GEF support to replicate ICM programs will have immediate and direct effects on the priority ICM sites:

- a. It will facilitate the transfer and application of these instruments to local governments, communities, and other stakeholders. By capacitating local governments with ICM development and implementation tools, including integrated land- and sea-use zoning, vulnerability/risk assessment, integrated environmental monitoring, State of the Coasts (SOC) reporting, etc.;
- b. It will build in-country experience and partnerships to mentor, assist and replicate good practices; and
- c. It will contribute to the experience and knowledge base required to scale up SDS-SEA implementation nationally and regionally to address new and emerging challenges to building sustainable coastal and ocean-based economies.

107. Component 3: Knowledge platform for building a sustainable ocean-based blue economy places emphasis on resource allocations to ICM, SAP/NAP implementation, climate change adaptation and disaster risk reduction, which are expected to increase as a result of national coastal and ocean policy adoption and mainstreaming related objectives and targets into national and local government medium-term development plans. Major component activities to be implemented include:

- a. establishing accredited ICM and special skills training courses and programs at the regional and country levels;

- b. enabling ICM Learning Centers, Regional Centers of Excellence and educational institutions to train, educate and build awareness in coastal and ocean governance;
 - c. increasing public and private sector awareness and promoting investments in enterprises, technologies, practices and services that contribute to a sustainable ocean-based blue economy;
 - d. mobilizing donors, domestic and foreign investors and other concessional sources of funding to help address program gaps in means and capacity; and
 - e. promoting the replication of innovative financial and economic instruments and other incentives designed to drive positive changes in behavior.
108. GEF incremental support will:
- a. develop/access available knowledge products (case studies; good practices; exemplar policies; applied research; etc.) from the GEF/UNDP program, and other national, regional and global projects and programs, as appropriate;
 - b. transform knowledge products and innovative tools into perspectives and context that are better understood and appreciated at the local government and community levels; and
 - c. proactively promote knowledge products and their adaptation/application through Communities of Practice, training and education programs, and support services to national and local governments. Among others, the support system will include a network of ICM Learning Centres, ICM Communities of Practice, targeted research on application of ecosystem-based management, use of innovative economic and financing instruments, engaging the corporate and business sector, and recognition of good governance and sustainable practices.
109. Finally, Component 3 will also strengthen global partnerships by contributing to global learning on sustainable coastal and ocean governance and management through the GEF IW Learn Network. Global environmental benefits will accrue from this project as a consequence of:
- a. a functional, self-sustained regional ocean governance mechanism, founded on intergovernmental and multi-sectoral partnerships, addressing global issues and challenges to the sustainable development and management of coasts and oceans;
 - b. on-the-ground applications/demonstrations of the ICM framework at the local level covering: i) strengthening the resiliency of coastal and marine resources and coastal communities through CCA/DRR policies and measures; ii) conservation and sustainable use of biodiversity in biodiversity hotspots in threatened habitats of mangroves, coral reefs, sea grass beds and coastal wetlands in priority coastal areas and LMEs; iii) recovery of depleted fish stocks in priority fishing areas supported by, e.g., no-take zones, fisheries refugia, and sustainable mariculture and aquaculture production that ease pressure on capture fisheries, and iv) reduction of pollutants, such as nutrient discharges, that lower the productivity of marine ecosystems, sometimes creating ‘dead’ zones;
 - c. increase in the allocation of resources to sustainable management of coastal and marine ecosystems via scaled-up ICM programs and related approaches across the region, thereby contributing to global targets, including for example: i) disaster risk reduced by 2015 (UNFCCC and Hyogo Framework of Action); ii) conservation of at least 10% of

coastal and marine areas of particular importance for biodiversity and ecosystem services by 2020 through well connected systems of protected areas and other effective area-based conservation measures (Aichi Biodiversity Targets); and iii) improvements in marine water quality in priority coastal areas and river basins (Global Plan of Action for Land-based Sources of Marine Pollution).

Component 1: Partnerships in Coastal and Ocean Governance

OUTCOME 1: A SELF-SUSTAINING, COUNTRY-OWNED, REGIONAL MECHANISM GOVERNING AND MANAGING LMES AND COASTAL WATERS, REBUILDING AND SUSTAINING ECOSYSTEMS SERVICES AND REDUCING THE IMPACTS OF CLIMATE CHANGE ON COASTAL POPULATIONS IN THE EAST ASIAN SEAS REGION

PEMSEA Partners have adopted the principle that “the financial sustainability of a non-profit organization is its capacity to obtain revenues in response to a demand to sustain productive processes at a steady or growing rate in order to produce desired results.”

The goal of PEMSEA is to identify a number of steady financing streams that will generate funds to sustain its current level of operations, growing at a certain rate over time to realize the common SDS-SEA vision of its Partners.

To achieve this goal, PEMSEA has adopted the following strategies:

- a. Good Governance and Efficient Management. Good governance and efficient management practices will gain the trust and confidence of the stakeholders and encourage them to invest in the projects and activities of PEMSEA.
- b. Communications. PEMSEA will demonstrate to the global community that it is a responsible and efficient organization. Communicating success stories and achievements of PEMSEA will make the organization more visible. Funders and other stakeholders will want to affiliate or align with a successful organization.
- c. Relationship Building. Building strong relationships with Partners, regional and subregional organizations and other concerned stakeholders from within and outside the region will provide opportunities for funding as well as undertaking joint projects that contribute to achieving the regional SDS-SEA vision.
- d. Funding Diversification. Funding diversification makes the organization more stable. Dependence on one or a few major funders will rock the organization when such major funders make changes in policy directions and withdraw or end financial support. This will require reliance on Partner support and innovative approaches to sourcing funds.

These strategies are interlinked. Good governance and efficient management is basic to organizational stability and achieving goals and targets. PEMSEA will communicate this strength as well as its achievements. PEMSEA will build good relations not only with its Partners but to all its existing and potential collaborators and stakeholders. These efforts will build confidence in

PEMSEA among its Partners and potential funders that will form the broad base of PEMSEA's funding sources.

The Plan

PEMSEA's Financial Sustainability Plan is a 5-year medium-term plan that was adopted by the EAS Partnership Council, PEMSEA's Governing Body, in October 2011. It will have two phases – the Transition Phase and the Transformation Phase.

1. The Transition Phase or the Design Phase runs from October 2011 until March 2014. This phase is characterized by intensive planning, consultation and re-engineering of PEMSEA as an international organization.
2. The Transformation Phase or the Action Phase is for three years, April 2014 to March 2017. During this phase, PEMSEA will focus on actions to create variable and sustainable funding sources.
3. April 2017 will be the start of PEMSEA's Sustainability Phase. It is expected that the implementation of the Financial Sustainability Plan will establish varied sustainable streams of income that can cover the cost of PEMSEA's operations growing at a steady rate.

Implementation

The plan will be implemented as a collaborative undertaking among the different PEMSEA mechanisms. The success of the implementation of the Financial Sustainability Plan rests on the collective efforts of the PEMSEA Resource Facility and its staff, the Executive Committee, the EAS Partnership Council and the Partners, the Sponsoring Organizations (i.e., GEF; UNDP; The World Bank), as well as the other stakeholders in the region.

The Transition Phase has made substantial progress in the following areas:

- a. Legal Personality and Voluntary Contributions from PEMSEA Partners. The Agreement on the Recognition of PEMSEA's International Legal Personality was signed by 8 countries in 2009. This Agreement is being employed as the basis for Partner countries to secure commitments from their respective governments to support PEMSEA. In 2013, Country Partners China, Japan, Philippines, RO Korea and Timor Leste voluntarily committed to provide in-kind and in-cash support to PEMSEA for the operation of core activities of the organization, including management and administration of the PEMSEA Resource Facility, fundraising and secretariat services to the EAS Partnership Council.

It is emphasized that, during the Transformation Phase, voluntary contributions from PEMSEA Partners will be key to the sustainability of PEMSEA and SDS-SEA implementation. Certainly, for this project, the \$138 million plus in contributions (in-kind and in-cash) from participating countries provides evidence of the respective governments' commitment to the targets and objectives of the SDS-SEA. Over the next 5 years, strong support from the Partners is also crucial to sustain PEMSEA as an organization until other revenue sources can be set up and operationalized. Voluntary aspects that will be addressed during this project include:

Host Country Support. Sustained host country support will find basis in the Headquarters Agreement with the Government of the Philippines. This is expected to become a budget line for the Department of Foreign Affairs, Department of Environment and Natural Resources and/or other relevant national agencies in the Philippines.

Hosting of Council Meetings. Country Partners through their national focal points will have the privilege of hosting the EAS Partnership Council annual meetings. The PRF will prepare guidelines for hosting of meetings, including a schedule for hosting. Currently, there are 11 Country Partners. Thus, a Country Partner can exercise its hosting privilege at least once every 10 years.

Hosting of the EAS Congress. The EAS Congress is held every three years. A Country Partner will have the privilege of hosting the EAS Congress only every 20 years or so. Guidelines for hosting the EAS Congress have been developed and employed in previous hosting arrangements with the Governments of the Philippines (2009) and RO Korea (2012).

Self-funded Participation. Country and Non-Country Partners are expected to support their own participation in PEMSEA events, including the EAS Partnership Council Meetings and the EAS Congress. During the Transformation Phase, requests for support of GEF-eligible countries will be considered on a case-by-case basis only.

- b. Headquarters Agreement. The Headquarters Agreement with the Philippines concretizes the continuous obligations of the Philippines to host PEMSEA, provides operational support and grants PEMSEA certain privileges and immunities to enable it to function as an international organization. The Agreement was signed in July 2012, and is currently being reviewed by the Philippines Senate for ratification. Upon ratification, which is expected to occur by April 2014, the Agreement will be registered with the United Nations.
- c. Re-engineering of the PEMSEA Resource Facility (PRF). The re-engineering of the PRF ensures cost-efficient management of resources and promotes harmonious working relations that will make the PRF more responsive to the needs of the region. The PRF will be lean with only 5 prudent “core staff” for managing the organization and serving as secretariat to the EAS Partnership Council. “Project implementation staff” will be responsible for, and funded via, project delivery. PRF will improve its staff complementation through secondments and internships. Seconded staff will perform results-oriented duties including coordination works relative to the national implementation of the SDS-SEA.
- d. Governance and Management Rules. The codification of PEMSEA’s rules of governance and operations promotes transparency and provides a solid basis for action. The rules of governance were adopted by EAS Partnership Council in April 2013. PEMSEA’s management and operational rules and regulations comply with the international standards that are acceptable to most funders. Specific attention has been given to the financial, accounting and auditing systems of PEMSEA. The organization was certified as ISO 9001-2008 compliant in October 2013.
- e. Ethical Standards. Many funders now incorporate good governance and ethical standards in their criteria. A code of ethics that includes provisions on disciplinary measures has been incorporated in the PEMSEA rules of governance, which assures the funders of the highest ethical standards of the organization and its staff and consultants in the performance of their duties and responsibilities.

The Transformation Phase will be facilitated as part of this project, including outputs and actions identified under Outcomes 1 through 10 of this Project Document. A number of activities will be developed and launched that not only generate income for the organization, but at the same time facilitate the sustainability of SDS-SEA implementation and achievement of its objectives and targets, as follows:

- a. ICM Training (Outcomes 3, 4 and 9). An ICM training program will be organized to provide intensive training on ICM to build regional capacity to implement SDS-SEA. With the immense task of scaling up ICM to cover 20% of the coastline by the end of 2015, these trainings are not only essential, but have the potential for cost recovery if not income generation. The PRF will develop registration fees as well as promote sponsorships. Training sessions will be held physically in a classroom and via e-learning. To make the workshops more attractive, workshop certificates will be issued to recognize participants, not only in terms of skills and knowledge, but also as a step towards certification as an ICM professional.
- b. Special Skills Training (Outcomes 3 through 9). Special skills trainings will be organized and conducted regionally at least twice a year on hot issues and topics like MSP, EAFM, ecosystem valuation, risk and vulnerability assessment, State of Coasts (SOC) reporting, etc.. PRF will develop registration fees as well as promote sponsorships for these trainings. Training workshops will be held in the field and through the internet. Learning packages and other documents will be published in support of capacity development. Workshop certificates will be issued to recognize the special skills that have been acquired by the participants, as a step towards certification as an ICM professional.
- c. Accreditation (Outcome 9). PEMSEA will develop an accreditation system. ICM Learning Centers and the National and Regional Task Forces established under this project will be accredited as ICM service providers. Accreditation is essential to ensure quality in the delivery of services, as well as access to the most recent information on case studies and good practices. An accreditation fee scheme will be developed and implemented as part of this project.
- d. ICM Professional Certification (Outcomes 2 and 9). Countries in the Seas of East Asia region have made commitments to scaling-up ICM to cover 20% of the coastline by 2015. The development gains in coastal and ocean governance and management have grown by leaps and bounds in the past decades, but it is also equally important to recognize that coastal and ocean issues in the region are becoming increasingly intertwined and complex due to emerging global environmental change issues and trends, such as climate change adaptation and reducing the impacts of other natural and manmade hazards. The need therefore to create an incentive for coastal managers to pursue and continually develop their careers is critical to ensure the sustainability and benefits of ICM programs. Additionally, it is important to acknowledge the efforts put in by the coastal practitioner in his/her chosen field.

Recognizing this requirement, PEMSEA will develop and launch an experience-based ICM Professional Certification Program for coastal practitioners who are active in coastal and ocean governance and management. The Certification Program acknowledges that coastal leaders are trained to deal with specific tasks depending on the need and context of an area, as well as the mandate and objectives of their respective organizations. Participants will be assessed on the basis of their capacities in ICM planning, development, coordination, implementation and sustainability. The program will be designed to suit three career tracks: practitioner; manager; and leader/executive. A certification fee scheme will be developed during the course of this project. Sponsorships will be sought from international and regional organizations, donors and the private sector.

In addition, as part of Outcome 2, national policy and legislation will be prepared in collaboration with Partner Countries, specifying the advantages and requirements for ICM professional certification within the planning, resource management and environment departments of

concerned national agencies and local governments. Such directives are expected to drive the demand for ICM professional certification across the region.

- e. ICM Code and Recognition (Outcomes 3 to 7). PEMSEA has prepared a code of ICM good practices for voluntary use by coastal provinces and municipalities. In accordance with the 5-year SDS-SEA Implementation Plan, the ICM Code and Recognition System will be put into practice as an essential component of participating countries' national ICM programs, as well as for achieving the regional target of ICM coverage of 20% of the coastline by 2015. A recognition fee scheme will be developed and implemented as part of this project, in collaboration with local governments, local private sector/business community, donors and other interested stakeholders.
- f. Port Safety, Health and Environmental Management Code (PSHEM Code) and Recognition (Outcomes 3 and 7). PEMSEA has developed and demonstrated the benefits implementing the PSHEM Code in a number of international ports in the region. A 5-year operational plan is currently under development with the assistance of a donor (GTZ). The goal is to market the Code to national governments, Port Authorities and private port operators, using case studies from existing port demonstrations, and to offer PSHEM training, technical assistance and recognition services to international ports across the region. The 5-year operational plan will lay the foundation for an income-generating venture, and will be promoted to attract funders and sponsorships from the donor community, port industry and business sector.
- g. Project Development and Implementation (Outcomes 2 and 3). PEMSEA will prepare proposals in collaboration Country Partners, Non-Country Partners, local governments, regional organizations and programs, and other collaborating institutions for SDS-SEA-related projects in order to secure funding from donors, financial institutions, foundations, etc. PEMSEA will position itself for project implementation, either as the executing agency for the project or as part of the capacity development/technical assistance aspects of the project.
- h. Project Management (Outcomes 1, 2 and 3). PEMSEA has a proven track record in financial management and execution of donor-supported projects. PEMSEA is currently seeking recognition as an Implementing Partner of UNDP, in order to serve as Executing Agency for this project. With such recognition, PEMSEA will expand its portfolio, and seek opportunities to execute other regional and sub-regional GEF/UNDP ocean-related projects in the region.
- i. Partnerships with the Private Sector (Outcomes 3, 8 and 9). The various activities of PEMSEA as well as its strategies for knowledge management and advocacy are designed to generate interest and support among stakeholders, including the Private Sector. In July 2012, PEMSEA organized and conducted its first regional workshop with the corporate sector, and feedback was positive on the concept of building partnership arrangements with the corporate/business sector to facilitate SDS-SEA implementation, particularly "on-the-ground" investments in conservation, climate change adaptation and pollution reduction and management.

In this project, a more structured approach to engaging the corporate sector/business community as a partner will be applied, namely: a) establishing or building upon existing corporate sector/business community networks in each participating country; b) aligning the CSR programs of the corporate networks/individual companies with SDS-SEA implementation in the respective countries, including the goals, programs and commitments made by national and local governments for ICM development and implementation; c) developing and marketing a CSR roadmap among the corporate sector/business community to identify and facilitate PPP in ICM programs and related investments; d) organizing and conducting "blue economy business forums" in collaboration with the PNLG to serve as a marketplace for blue economy projects through PPP;

and e) developing and implementing case studies, good practices and a recognition system as informative material/incentive for the public and private sectors to support ICM and blue economy investments.

A cost recovery/revenue generating scheme will be developed as part of an operational plan for this component of the project. It is envisaged that such a scheme will consist of both membership fees as well as a professional fee for developing and brokering successful investment projects.

- j. PEMSEA Trust Fund (Outcomes 3 and 9): A Trust Fund will be established from a seed fund to be contributed by Partners, donors and the corporate sector, which will be placed under the care of a trustee or a board of trustees under a trusteeship agreement. The Trust Fund will be built over the course of this project using advocacy and marketing strategies and activities to engage PEMSEA Partners, donors and the private sector. Operating as an endowment fund, PEMSEA will be entitled to use the interest only to further the objectives and targets of the SDS-SEA. By April 2017, it is expected that the Trust Fund will be set up to provide a sustainable source of income to contribute to the core costs of PEMSEA. Over time, the Fund will continue to be promoted and grow to be the major source of revenue for the organization.
- k. Outreach Services (Outcome 10): At present, PEMSEA does not have a policy or standard operating procedure with regard to collaboration and technical assistance to other regions or countries outside of East Asia (e.g., Outreach Services). During this project, PEMSEA will explore opportunities with UNDP and other international organizations to assist other regions to develop or strengthen coastal and ocean governance programs at the regional and national levels, including: a) completing assessments of the current status of ICM programs and capacities; b) developing baseline SOC's on coastal and ocean governance; c) developing agreements on technical assistance/training support to transfer knowledge and experience from the GEF/UNDP East Asia program to other regions; d) providing training and technical assistance to build coastal and ocean management programs in other regions/countries using the PEMSEA model. In the longer term, the PEMSEA Resource Facility (PRF) may be developed as a central node to a global network of similar facilities, operating as a technical support, training and knowledge management network for ICM development and implementation.

PEMSEA is not a commercial enterprise, and therefore certain principles of operation will need to be developed and agreed to by the Governing Body of PEMSEA. For example, PEMSEA's outreach services should:

- be consistent with PEMSEA's mandate and objectives
- impart PEMSEA's comparative advantage in coastal and ocean governance and complement existing activities and competencies of the PEMSEA Resource Facility and its regional networks
- link directly to regional and global instruments, objectives and targets for protecting and sustaining coastal and marine ecosystem services, poverty eradication and building and nurturing an ocean-based blue economy through ICM development and implementation
- have a high likelihood of impact and benefit to the regions and countries that are beneficiaries of PEMSEA's outreach services
- have benefit and impact on PEMSEA and its Partners as advocates and leaders in coastal and ocean governance and building a blue economy
- facilitate adequate funding or an opportunity of obtaining such funding to fully support the outreach services provided by PEMSEA.

Output 1.1 Signed Agreements with Country and Non-Country Partners on voluntary financing and in-kind commitments to sustain PEMSEA's core operations

Activities under Output 1.1 are designed to facilitate the collaborative and joint planning with PEMSEA Partners and regional and subregional organizations, resulting in signed agreements in support of sustaining PEMSEA and SDS-SEA implementation.

Activities for Output 1.1

1.1.1 Organize and implement a collaborative planning and assessment system within PEMSEA, in order to determine progress, achievements, needs and new opportunities for financing and investing in national and regional SDS-SEA Implementation Plans.

1.1.2 Identify, develop, adapt and/or refine PRF products and services to assist Country and Non-Country Partners and other stakeholders in the EAS region address policy, technical and financial constraints in SDS-SEA implementation.

1.1.3 Implement the Sustainable Financing Plan and Road Map as adopted by the EAS Partnership Council in 2011, including the following activities that will contribute to achieving a self-sustained country-owned regional mechanism by April 2017:

- Market and make available PEMSEA products and services to Country and Non-Country Partners within the region (i.e., Outcome 3, Output 3.1, includes developing and putting in place agreements with Country Partners in support of sustainable financing, wherein Country Partners contribute to the annual operating costs of PEMSEA, and in return receive scheduled services, products, training opportunities, etc. from the PEMSEA Resource Facility and its regional network, which contribute to SDS-SEA implementation at the local, national and regional levels.)
- Explore and market PEMSEA products and services to non-Partner Countries within the region and outside the region (i.e., Outcome 10, Output 10.2 covers the development and implementation of a PEMSEA Outreach Services to non-member countries to build their capacities and transfer experience in coastal and ocean governance and ICM development and implementation, while generating income for the organization.)
- Develop and execute new projects in collaboration with Country Partners, donors, financial institutions, private sector, etc., in support of SDS-SEA implementation at the national and regional levels (i.e., Component 2, Outcomes 4 through 8, provide a framework of new project opportunities for PEMSEA to market its products and services to replicate ICM experiences in CCA/DRR; biodiversity conservation; MPA effectiveness; sustainable fisheries; pollution reduction; etc.) to the public (Output 2.3) and private sectors (Outputs 3.1 and 4.1.)
- Become an Implementing Partner of UNDP, GEF and other development organizations working in the region (i.e., Outcome 1 explains the good governance and financial management standards that PEMSEA has accomplished in order to build confidence with Partners and potential funders. PEMSEA is initially targeting to become a UNDP Implementing Partner, in order to facilitate execution of regional projects on behalf of UNDP, and generate revenue for the organization. Over the course of this project, as experience and trust is gained, PEMSEA will expand its status, seeking accreditation with other donors and organizations.)
- Scale up the ICM and PSHEM Code and Recognition Systems, including a Corporate Sector Responsibility Recognition System as a service to local governments and the

private sector (i.e., Outcome 3, Output 3.1 and Outcome 7, Output 7.2 will operationalize PEMSEA's ICM Code and Port Safety Health and Environmental Management (PSHEM) Code, which were developed and tested in the current project, for voluntary use by coastal provinces and municipalities and ports, respectively. Recognition systems and user fee schemes will be developed, marketed and implemented during this project, in collaboration with local governments, local private sector/business community, donors and other interested stakeholders.)

- Develop and promote an endowment fund/trust fund to provide a sustainable source of income for core operations of the organization. (i.e., Activities to be undertaken as part of Outcomes 3 and 9 include establishing a the Trust Fund over the course of this project, using advocacy and marketing strategies and activities to engage PEMSEA Partners, donors and the private sector. A donor's conference is planned in 2015 as a side event of the EAS Congress 2015. By April 2017, it is expected that the Trust Fund will be providing a sustainable source of income for the core operating costs of PEMSEA's secretariat. Over time, the Fund will continue to be promoted and grow to be the major source of revenue for the regional organization and its technical services.)

1.1.4 Negotiate and sign agreements with PEMSEA Country and Non-Country Partners, donors and corporate sector confirming commitments to PEMSEA operations and sustainability.

Output 1.2 Signed Partnership Agreements between PEMSEA and YSLME Commission, WCPF Commission and other regional governance mechanisms for collaborative planning, coordination and implementation among the respective SAPs, while addressing program sustainability and integration with broader regional cooperation frameworks

The second phase of the GEF/UNDP Yellow Sea Large Marine Ecosystem (YSLME) Project was approved by GEF Council in November 2012, under the same GEF/UNDP parent program as PEMSEA. Given the similarities in objectives, tools and approaches to reducing threats, bio-geographic scope and national government Partners, it is logical that PEMSEA and YSLME coordinate closely during implementation.

The Western and Central Pacific Fisheries Commission (WCPFC) was established by the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) which entered into force on 19 June 2004. Japan, RO Korea and the Philippines are Members, while Indonesia, Vietnam and Thailand are "Cooperating Non-Members". In addition to the similar bio-geographic scope, the conservation and management measures, scientific data functions, governance mechanisms of the WCPFC have some convergence with PEMSEA, and as such, close coordination and cooperation will be of mutual benefit to all relevant parties.

A further consideration under this output is the improved coordination and "integration" of regional governance mechanisms and strategic action plans for coastal and ocean management among various regional economic frameworks, mechanisms and targets, primarily those of ASEAN and APEC. The project will facilitate improved dialogue and collaborative planning between PEMSEA and the aforementioned regional organizations at the operational level (e.g., ASEAN Working Groups on: Climate Change; Nature, Conservation and Biodiversity; Coastal and Marine Environment; Water Resources Management; and APEC Working Group on Oceans and Fisheries), with stronger and regular interactions focused on transformational change in creating an ocean-based blue economy while protecting and rehabilitating coastal and marine ecosystem services across the region.

Activities for Output 1.2

1.2.1. Conduct joint consultations and collaborative planning with YSLME Commission, WCPFC and other regional organizations, including relevant regional economic mechanisms of ASEAN and APEC, to align strategic objectives, action plans and activities.

1.2.2. Identify areas to cooperate, including strengthening of coordinating mechanisms and arrangements, information sharing, joint and collaborative implementation of projects, and development of knowledge products and informative materials.

1.2.3. Develop and implement a project coordinating, reporting, monitoring and evaluation and information sharing system among the three projects of the EAS Program.

1.2.4. Negotiate and sign agreements with the YSLME Commission and WCPF Commission on collaborative planning, implementation and reporting (EAS Congress 2015), and with other regional mechanisms by the end of the project.

Output 1.3 The EAS program monitored, evaluated and reported to stakeholders via Regional State of Oceans and Coasts Report

As part of the periodic assessment of the progress of the SDS-SEA, and in order to keep up with the dynamics of project implementation across UNDP's EAS Program, a number of activities are envisioned. The project will support the organization and conduct a review of SDS-SEA, YSLME and WPEA SAP implementation, taking into consideration indicators and priorities that have been adopted at the national, LME, regional and global levels related to sustainable development of coasts and oceans (e.g., Sustainable Development Goals (SDG)) and building an ocean-based blue economy in the East Asian region. A regional State of the Ocean and Coasts (SOC) reporting system will be developed and implemented, building on the foundation of existing monitoring and reporting systems within the regional and globally. The regional SOC will include the three projects under the UNDP EAS program (i.e., PEMSEA, YSLME; WPEA), as well as inputs from countries and other sub regional/regional projects and programs.

Activities for Output 1.3

1.3.1. Organize a PEMSEA Expert Advisory Group (PEAG) to review, evaluate and update the SDS-SEA and to provide guidance, direction and oversight on the preparation of a Regional State of Oceans and Coasts Report for the EAS region.

1.3.2. Conduct national / regional consultations/assessments among governments, regional organizations, partners, collaborators and other stakeholders regarding contributions, impacts and benefits derived from regional, LME and national programs and projects in support of the SDS-SEA, YSLME and WPEA SAPs, and the objectives of the UNDP EAS Program, as well as other regional and global targets of related international conventions, agreements and action plans.

1.3.3. Prepare a Regional State of the Oceans and Coasts report for dissemination, review and input from stakeholders groups at the regional, sub regional/LME and national levels.

1.3.4. Submit the updated SDS-SEA and endorsed Regional State of the Oceans and Coasts Report to the Ministerial Forum 2018 for adoption by the Ministers of PEMSEA Partner Countries (EAS Congress 2018).

1.3.5. Formulate and submit an updated 5 year regional SDS-SEA Implementation Plan to the EAS Partnership Council 2018, based on the updated SDS-SEA.

Interim outputs under Outcome 1:

- Host Country Agreement ratified and implemented with the Government of the Philippines
- Formal agreements signed and implemented with PEMSEA Partner Countries, donors and corporate sector in support of a self-sustaining PEMSEA and SDS-SEA implementation
- Formal agreements signed with YSLME Commission (to be constituted), WCPF Commission and other regional and sub-regional programmes, regarding collaborative planning, implementation and reporting across organizations, projects and programs under the UNDP GEF East Asian Seas Program
- Formal agreement submitted to Ministers of National Focal Agencies of Partner Countries for the adoption of an updated SDS-SEA regional strategy
- Updated 5-year SDS-SEA Implementation Plan adopted by the EAS Partnership Council
- The impacts and benefits of management interventions of the UNDP GEF East Asian Seas Program, including SDS-SEA, YSLME and WPEA SAPs evaluated and packaged in a Regional State of Oceans and Coasts Report
- Regional State of Oceans and Coasts Report submitted to the EAS Congress and Ministerial Forum

OUTCOME 2: NATIONAL AND LOCAL GOVERNMENTS ADOPTING AND INITIATING OCEAN POLICY, LEGAL INSTRUMENTS, INSTITUTIONAL IMPROVEMENTS AND PROGRAMS, AND MAINSTREAMING SDS-SEA TARGETS INTO THEIR MEDIUM-TERM DEVELOPMENT AND INVESTMENT PLANS

Output 2.1 Improved national coastal and ocean policies and institutional arrangements for sustainable management of priority coastal and marine areas, surrounding watershed and blue economy development initiated in at least 6 participating countries

Since 2003, countries have made considerable progress in formulating and initiating national policies and action plans to promote sustainable coastal development. In fact, nine (9) countries have launched the development, adoption and/or implementation of respective national policies and strategies related to oceans and coastal development. In Laos PDR, a National Water Resources Strategy has been developed and adopted. As reported above, over eighty (80) pieces of legislation have been enacted which contribute to SDS-SEA implementation. In this connection, interim national interagency coordinating mechanisms have been set up and are operational in Indonesia, Thailand and Timor-Leste, while China, the Philippines and Vietnam are in process. Lao PDR has established a River Basin Committee.

This progress is headed in the right direction, as countries are taking steps to address constraints to sustainable development and ensure that policy development and implementation processes are harmonized to the extent possible, in order to eliminate policy conflicts and address gaps. Actions will focus on facilitating the approval, adoption and initiation of national ocean policy, ICM policy and legislation and the institutionalization of permanent national interagency coordinating mechanisms in participating countries.

Activities for Output 2.1

2.1.1 Develop and disseminate case studies/good practices on ICM and blue economy.

2.1.2 Organize national forums/workshops to build awareness and consensus on need for national ocean policy/ICM legislation, and prepare relevant reports.

2.1.3 Provide technical assistance for the drafting, submission and reviews of national ocean policy and ICM legislation.

2.1.4 Promote and facilitate the adoption of national ocean policy, ICM policy and legislation and supporting institutional mechanisms in Cambodia, China, Indonesia, Philippines, Thailand, Timor Leste and Vietnam.

2.1.5 Publish and disseminate National State of Oceans and Coasts Reports in all 8 participating countries for the EAS Congress 2015 (Note: State of River Basins Report in the case of Lao PDR).

Output 2.2 National sector legislative agenda developed in at least 6 participating countries on ICM, CCA/DRR, integrated land and sea use zoning/marine spatial planning and other innovative regulatory and economic instruments

While progress indicates that national coastal and ocean policies and legislation are gradually coming into place, there are indications that the content of these policies and laws are not fully understood by relevant policy makers and stakeholders alike. The challenge continues to be to promote understanding across sector-based agencies and programs at national and sub-national levels. In many cases, there is misalignment, conflict, duplication of effort and sub-optimal use of financial and human resources. National policies, plans and strategies cover a wide range of sector/thematic areas including pollution reduction, environmental management and protection, natural and anthropogenic hazards, water resources management, fisheries resources management and biodiversity conservation. In view of these challenges, implementation of innovative tools and instruments to address ocean and coastal issues requires additional support.

Actions will support the review and assessment of national policy and legislation to identify institutional, technical and investment gaps and needs, in order to integrate and align sector-based regulatory and economic instruments with national ocean policy.

Activities for Output 2.2

2.2.1. Review and assess sector-based policies and legislation and prepare and disseminate analytical reports.

2.2.2. Prepare and disseminate case studies and policy briefs related to best practices in ICM, CCA/DRR, integrated land and sea use/marine spatial planning (MSP), sustainable fisheries, water use and conservation management, etc.

2.2.3. Conduct national forums/workshops to build consensus on legislative agenda and priorities, including the ratification and implementation of international conventions and agreements (e.g., RIO+20 Declaration; Agenda 21; UNCLOS; UNFCCC; GPA; CBD; RAMSAR; CITES; Basel Convention; London Convention; MARPOL; OPRC; CLC/FUND/HNS; Ballast Water and Sediments; and Anti-Fouling Systems), as relevant to the following countries: Cambodia, China, Indonesia, Lao PDR, Philippines and Vietnam.

2.2.4. Design and implement communications and advocacy campaigns in support of proposed policies/laws targeting policy makers at national and local levels.

Output 2.3 SDS-SEA targets incorporated into national and local medium-term development and investment plans in at least 3 participating countries and 8 participating local governments, including the start-up of national ICM programs and consolidated action plans to address CCA/DRR, biodiversity conservation and management, sustainable fisheries, water supply, conservation and use management, pollution reduction, etc., in priority coastal areas

Effective implementation of coastal and marine policies and programs is often constrained by insufficient financial and human resources. Sustainable financing remains an integral part of PEMSEA's efforts to formulate ocean-based policies and legislation, as local and national governments need to find ways to ensure long term implementation of programs. This means that efforts will require engagement of national policymakers, local chief executives and planners at the national and local levels to influence commitments and the identification of priority projects and programs in support of SDS-SEA objectives and targets for integration into their respective MTDPs. The activities identified below will be undertaken in all participating countries.

In order to strengthen and accelerate the implementation of ICM for sustainable development and climate change adaptation in line with the proposed SDS-SEA targets, countries will need to internalize targets in the medium and long term development plans at national and sub-national levels. The considerable progress towards development of coastal and ocean policies will continue, but will require additional efforts to ensure that policies are transformed into action. Mainstreaming is a process of making something the principal, dominant, or widely accepted idea.

While ultimately, senior policy makers would be the targets for data and information, which will flow into decision-making processes, mainstreaming will require actions on multiple fronts, using a range of tools, methods, instruments and approaches, and targeting different types of stakeholders to influence these processes. Actions would need to consider:

- a. Collaboration, information sharing and alignment/harmonization of policies and actions across national and local governments, sectoral agencies, departments and bureaus;

- b. Consensus-building, information sharing and policy-related dialogue between national and local governments, civil society and non-government organizations, indigenous peoples' organizations and special interest groups (i.e., women's organizations), private sector, state-owned enterprises, universities and other institutions of higher learning;
- c. Strengthening the information infrastructure required to facilitate access to relevant and timely information related to sustainable coastal and marine development, by all stakeholders;
- d. Ensuring that the most useful, pertinent, analytical and 'actionable' data/information is provided to key policy and decision makers in 'real time';
- e. Special efforts to create a better understanding of concepts, tools, methods, instruments and approaches in ICM, CCA/DRR, NAP/SAPs among and between ministries and departments with mandates for local and national finance, budget and planning, public works, communications and transport, trade and industry, etc.;
- f. Supporting policy advocacy to prioritize key issues in coastal and marine affairs, and inform constructive dialogue in advancing ideas, knowledge, technology, etc.;
- g. Create and promote demonstrations, models, learning opportunities and 'proof of concept' of knowledge, technologies, good practices and other policy-related issues in scaling up of ICM, CCA/DRR and implementation of NAPs/SAPs;
- h. Building and leveraging of partnerships, alliances and collaborative mechanisms to package, position and present scientific and technical data/information to key stakeholders, including policy and decision makers at local and national levels; and
- i. Facilitating public affairs and outreach activities which strengthen awareness and understanding of key coastal and marine policy issues among and between different constituencies in order to inform and strengthen participation and interactions with local and national governments.

Activities for Output 2.3

- 2.3.1 Strengthen, develop/activate internet-based information access through websites, portals that are regularly updated, refreshed and maintained with functionalities that permit data mining, query, keyword searches, trending reports etc.
- 2.3.2 Organize and conduct national and regional training workshops, seminars and forums in support of SDS-SEA and ICM scaling up and blue economy development.
- 2.3.3 Engage and capacitate the Twinning Secretariat for IRBCAM to foster more meaningful exchanges, expand technical scope and integrate with other knowledge management platforms.
- 2.3.4 Set up and implement a functional platform to promote, facilitate, structure and package projects and investments in support of SDS-SEA and ICM scaling up and blue economy development in the EAS region.

- 2.3.5 Continue to support, build up and strengthen outreach of Xiamen World Ocean Week (XWOW) as a regional/global venue for demonstration of good practices, building alliances and sharing of knowledge, ideas and experience in ICM implementation.
- 2.3.6 Support the triennial Ministerial Forum as part of the EAS Congress to engage leaders and policymakers to secure commitments on decisions affecting the blue economy.
- 2.3.7 Support the triennial EAS Congress, which serves as a venue for multi-donor collaboration and participation in investments in scaling up of ICM implementation.
- 2.3.8 Organize and convene policy forums to increase awareness and understanding of policymakers, including linkages with annual trainings/forums of national and regional partners and collaborators.
- 2.3.9 Facilitate local/national policy/technical workshops and PNLG forums to engage local governments, civil society and private sector in investment-related dialogue.
- 2.3.10 Conduct of national coastal and ocean governance forums, seminars and study tours among national and local leaders in participating countries, including participation in PNLG Forums, Xiamen World Ocean Week (XWOW) and EAS Congresses.
- 2.3.11 Provide technical assistance and advice to line agencies and decision makers at national and local levels in support of mainstreaming SDS-SEA / ICM Implementation Plans and targets into national and local government investment plans.

Interim outputs under Outcome 2:

- 6 participating countries adopt and initiate national coastal and ocean policy, as well as national SDS-SEA implementation plans, supporting legislation and institutional arrangements
- 6 countries develop and initiate a national legislative agenda addressing sectoral issues in support of the national ocean policy, including CCA/DRR, integrated land- and sea-use zoning/MSP, etc.
- 3 national governments and 8 local governments incorporate SDS-SEA/ICM, CCA/DRR, and SAP/NAP targets into their respective medium-term investment plans and initiate investments
- 100 % of participating countries complete and disseminate national SOC reports

OUTCOME 3: INNOVATIVE FINANCING MECHANISMS IN PLACE FOR SUSTAINED OPERATION OF THE COUNTRY-OWNED, REGIONAL COORDINATING PARTNERSHIP MECHANISM

Output 3.1 Suite of products, services, funding mechanisms and partnership arrangements adopted and implemented in collaboration with Partners, Sponsoring Organizations, donors and private sector/business community (e.g., Port Safety Health and Environment Recognition System; ICM Code and Recognition System; and CSR engagement strategy, including national and regional networking and recognition systems

The PEMSEA Resource Facility is transforming into a self-sustaining provider of secretariat and technical services to PEMSEA Partners and collaborators. The objective of the transformation is to make the PRF more flexible, responsive, efficient and cost effective from an operational point of view. In this connection a PRF Re-Engineering Plan has been prepared, based on outputs from the 3rd Meeting of the EAS Partnership Council, the 7th and 8th Meetings of the PEMSEA Executive Committee, comments from a Technical Working Group representing a range of PEMSEA stakeholders, and an analytical review and assessment of PEMSEA's experience to date. The re-engineering plan for the PRF, in the short term, has needed to consider the following:

- a. Delineating and confirming the core technical functions and services of the PRF;
- b. Integrating secretariat and technical functions into the scope of work of PRF personnel;
- c. Creating an organizational structure that is “flattened”, yet capable of providing adequate level of service and support to Partners and collaborators;
- d. Optimizing intellectual capital and capacities across the region, including the NTF/RTF, ICM Learning Centers, Country and Non-Country Partners, among others;
- e. Ensuring that terms of reference for PRF staff leverage requisite skills and knowledge and are aligned with priority targets;
- f. Developing an internal human capital development/management system appropriate for an international organization; and
- g. Building on the relationships, tools, methods and approaches of the previous Project Management Office.

Execution of the PRF Re-engineering Plan is ongoing and consists of a series of steps, including:

- a. Phasing-in of structural changes;
- b. Building up capacity of existing staff to adapt effectively to implement the functions and services of a re-engineered PRF; and
- c. Revising/developing new procedures and operating practices for the PRF including a systematic process for monitoring, evaluating and continually improving service delivery, which will be tested and refined in the context of this GEF project.

As a corollary to the PRF Re-Engineering Plan, and in order to address the challenges of sustainability of PEMSEA as an international organization, a PEMSEA Financial Sustainability Plan and Roadmap 2011-2016 has been developed. The plan consists of a review of the existing financial situation, priority considerations in the short term (2011-2013) and proposed medium term roadmap to 2016. Some of the main thrusts of the plan include the following:

- a. Establishing a PRF Core Group;
- b. Maintaining and strengthening the PRF Project Implementation and Support Group;
- c. Ensuring financial sustainability of the EAS Congresses;
- d. Developing and maintaining minimum fiduciary standards consistent with international best practice;
- e. Preparing a prospectus of PRF products and services in support of scaling up national ICM development and implementation programs;
- f. Developing an information system which captures relevant data from technical and financial assistance of donors, international organizations, and other sources of support for sustainable coastal and marine ecosystems in order to establish a pipeline of projects and initiatives;
- g. Develop and implement a communications program focused on practical achievements of PEMSEA Partners implementing ICM, including the products, tools and services of PRF;
- h. Support the preparation of a PEMSEA project portfolio;
- i. Develop and launch a PEMSEA corporate network of concerned businesses, under a recognition system;
- j. Develop and initiate a PEMSEA service designed to influence private sector/business partnerships and investment initiatives in sustaining coastal and marine ecosystem services through ICM;
- k. Develop and promote an endowment fund to secure and sustain coastal and marine ecosystem services in critical areas; and
- l. Organize and initiate a PEMSEA certification program for ICM professionals, operating within a constellation of networks (NTF/RTF, Learning Centers, etc.).



Figure 6. Schema of innovative financing mechanisms supporting the PRF

Activities for Output 3.1

3.1.1. Consult with PEMSEA Partners, Non-Country Partners, private/corporate sector and other collaborators to update the PEMSEA Sustainable Financing Plan and Road Map.

3.1.2. Develop, refine and promote the suite of PEMSEA branded products and services, including training courses, technical assistance and ICM recognition/ certification system.

3.1.3. Conduct surveys, data-gathering and collaborative planning with PEMSEA Partners, Non-Country Partners and other external sources of funding to develop and finance flagship projects.

3.1.4. Develop, promote and negotiate the establishment and operationalization of a PEMSEA Trust Fund through voluntary contributions from Country and Non-Country Partners, donors, the private sector/business community and other interested parties, as a primary mechanism for providing sustainable financing to the core operations of the regional mechanism over the longer term.

3.1.5. In collaboration with GEF, UNDP and other international organizations, explore opportunities for the development of outreach services, for the purpose of transferring good practices and accelerating improved governance and sustainable development of coastal and marine areas and resources in countries outside of the EAS region.

Interim outputs under Outcome 3:

- 100 % of the PEMSEA's core operations (i.e., management, administration, planning, fundraising and secretariat services) sustained through a PEMSEA Trust Fund with voluntary commitments from Country and Non-Country Partners, donors and the private sector/business community and other interested parties
- 100% of PEMSEA's technical services sustained through the delivery of products and services to Partners, Sponsoring Organizations and collaborators (e.g., PSHEMS, ICM and CSR recognition systems)
- PEMSEA outreach services operationalized to facilitate improved coastal and ocean governance in non-Partner countries in the EAS region and outside of the region and providing a source of revenue to the organization

Component 2: Healthy and Resilient Marine and Coastal Ecosystems

To achieve the twenty percent (20%) ICM target, participating countries will identify priority coastal and watershed areas and the major challenges to rehabilitating and/or sustaining coastal and marine ecosystems. It will use the ICM approach to strengthen local governance of and services provided by coastal and marine areas and resources and build partnerships and leverage investments in on-the-ground interventions at a number of priority sites, each with a different thematic /technical emphasis.

It should be noted that for tools, methods and processes applied in Component 1 will be those that have been established and proven through PEMSEA's experience with ICM through its sustainable development framework (Figure 4). The targets proposed in Component 2 are extensive, and will require application of tools, methods and approaches not all of which are currently within the ambit of PEMSEA. In the implementation of Component 2, PEMSEA will apply where appropriate, its own capacity-building and training modules (e.g., ICM; coastal use zoning; risk assessment; integrated environmental monitoring; etc.)

These will be supplemented by a range of specific tools, methods and approaches which are the in the domain of various existing PEMSEA Non-Country Partners, and some anticipated new Non-Country Partners and collaborators, including projects and programs supported by GEF Implementing Agencies. Table 10 profiles the potential collaborators, along with relevant PEMSEA sustainable development themes, nature of the specialized knowledge, tools and approaches offered by each collaborator, and the Output for which these are relevant. The list of partners and tools is provisional, and includes those that reach across national boundaries and jurisdictions (e.g. regional institutions, regional projects, or those covering more than 2 countries). The repertoire of partners and tools will be enhanced during project inception and into implementation, to include other partners with more localized knowledge at the level of the ICM priority sites, which are presented in Tables 12 to 18.

Table 10. Partners/Collaborators, Tools and Approaches to be leveraged to Achieve Component 2 Targets

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
ACLEDA Bank plc, Phnom	Food Security and	• Microfinance (capacity building)	Output 5.2

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
Penh, Cambodia http://www.acledabank.com.kh	Sustainable Livelihood Management	and program development0	
Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP) www.nowpap.org	Pollution Reduction and Waste Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Marine litter • Eutrophication assessment • Integrated coastal area and river management (ICARM) • Data visualization / mapping for marine pollution • Regional oil spill preparedness and response 	Outputs 6.1, 6.2, 7.1
ASEAN Centre for Biodiversity (ACB), Los Baños, Philippines www.aseanbiodiversity.org	Habitat Protection Restoration and Management	<ul style="list-style-type: none"> • Scaling up coverage and effectiveness of conservation areas and protection of threatened species in selected ICM priority sites • Innovative economic and financial instruments 	Output 4.3, 4.4, 5.1, 5.2, 8.1
ASEAN-GIZ Sustainable Port Development Program www.sustainableport.org	Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Port safety, health and environmental management 	Output 7.2
Asian Development Bank http://www.adb.org/themes/environmental-initiatives-partnerships/adb-gef	Pollution reduction and waste management Habitat Protection Restoration and Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Payment for ecological services • Pollution reduction and technologies • Climate change adaptation 	Outputs 4.4, 6.1 and 6.2
Asian Disaster Preparedness Center (ADPC), Bangkok, Thailand www.adpc.net	Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Mainstreaming DRR • Emergency preparedness and response • Multi-hazard early warning systems • Flood risk management 	Output 7.1
Capturing Coral Reef and Related Ecosystems Services (CCRES) Project, Global Change Institute, University of Queensland, Brisbane, Australia www.gci.uq.edu.au/projects/capturing-coral-reef-related-ecosystem-services	Habitat Protection Restoration and Management Water Use and Supply Management Food Security and Sustainable Livelihoods Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Valuation methods to support LGU planning processes related to CCA/DRR and sustainable livelihood development in selected sectors (e.g., ecotourism, fisheries) • Innovative economic and financial instruments 	Outputs 4.3, 4.4, 5.1, 5.2, 7.1, 8.1
Centre for Marine Environmental Research on Innovative Technology (MERIT), City University of Hong Kong	Habitat Protection Restoration and Management Water Use and Supply	<ul style="list-style-type: none"> • Protection of threatened species • Environmental impact and risk assessment related to eutrophication, HABs etc • Investments in technologies 	Outputs 4.3, 4.4, 6.1, 6.2, 9.1

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
www.cityu.edu.hk/bch/merit/	Management Pollution Reduction and Waste Management	related to pollution assessment, reduction and water quality monitoring	
Coastal and Ocean Management Institute (COMI), Xiamen University, China	Habitat Protection Restoration and Management Pollution Reduction and Waste Management	<ul style="list-style-type: none"> • Environmental economics • ICM Training • Water quality monitoring and modeling 	Outputs 5.1, 9.1, 9.2
Conservation International www.conservation.org	Natural and Man-Made Hazard and Prevention Management Habitat Protection Restoration and Management	<ul style="list-style-type: none"> • MPA / MPA networking • Vulnerability assessments to support CCA/DRR 	Outputs 4.3, 4.4, 7.1
Coral Triangle Initiative (CTI), Manado, Indonesia (Secretariat) www.coraltriangleinitiative.org/	Habitat Protection Restoration and Management Food Security and Sustainable Livelihood Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • GIS spatial data base and mapping tools • EAFM • Developing MPAs / MPA networks • Climate change adaptation in coastal communities • Innovative economic and financial instruments 	Outputs 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 7.1, 8.1
EEPSEA (Economy and Environment Program for South East Asia), c/o WorldFish Center, Los Baños, Philippines www.eepsea.org	Habitat Protection Restoration and Management Water Use and Supply Management Pollution Reduction and Waste Management	<ul style="list-style-type: none"> • Access to network of researchers and institutions • Capacity building on ecosystem valuation methods • Innovative economic and financial instruments 	Outputs 4.3, 4.4, 5.1, 6.1, 6.2, 8.1
Fauna and Flora International www.fauna-flora.org	Habitat Protection Restoration and Management Food Security and Livelihood Management	<ul style="list-style-type: none"> • Integrating conservation, livelihoods and governance • Conservation and gender • Livelihoods vulnerability analysis 	Outputs 4.2, 5.2
First Institute of Oceanography, Qingdao, China www.fio.org.cn/en/index.jsp	Habitat Protection Restoration and Management	<ul style="list-style-type: none"> • MPA management for coastal wetlands • Ecological assessments • Coastal and sea use zoning • Marine environmental monitoring 	Outputs 4.2, 4.3, 5.2, 9.1
Grameen Foundation, Makati, Philippines www.grameenfoundation.org	Food Security and Sustainable Livelihood Management	<ul style="list-style-type: none"> • Microfinance (capacity building and program development) 	Output 5.2
International EMECS Center, Kobe, Japan www.emecs.or.jp	Water Use and Supply Management Knowledge Management	<ul style="list-style-type: none"> • Management of semi-enclosed seas • Research and advocacy on marine issues 	Outputs 6.1, 6.2, 9.4

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
IOC- Subcommission for the Western Pacific (WESPAC), Bangkok, Thailand http://www.unescobkk.org/westpac/about-us/ioc-westpac/ioc-westpac/	Knowledge management	<ul style="list-style-type: none"> • Marine scientific research • Ocean observation system 	Outputs 9.1, 9.2
International Ocean Institute (IOI), Malta www.ioinst.org	National ocean policies and legislation	<ul style="list-style-type: none"> • Training in ocean policy and law 	Output 2.1, 2.2
International Petroleum Industry Environmental Conservation Association (IPIECA), Singapore www.ipieca.org	Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Sensitivity mapping • Oil spill preparedness and response • Improving social and environmental performance of oil and gas industry 	Outputs 7.1, 8.2
IUCN Asia Regional Office, Bangkok, Thailand www.iucn.org/about/union/secretariat/offices/asia/	Habitat Protection Restoration and Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • MPA / MPA network development • Mangrove restoration • Valuation of ecosystems services • Disaster risk reduction 	Outputs 4.1, 4.2 and 4.3, 4.4, 7.1
Korea Environment Institute (with Korea Adaptation Center for Climate Change), Seoul, Korea www.asiapacificadapt.net	Natural and Man-Made Hazard and Prevention Management Water Use and Supply Management	<ul style="list-style-type: none"> • Participation in Asia-Pacific Climate Change Adaptation Forum • River basin management • Oil spill impact assessment 	Outputs 6.1, 7.1
Korea Institute of Ocean Science and Technology (KIOST), Seoul, Korea http://eng.kiost.ac/kordi_eng/main/	Habitat Protection Restoration and Management Water Use and Supply Management Food Security and Sustainable Livelihoods Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Stress reduction in fisheries • Targeted research • Marine monitoring 	Outputs 5.1, 5.2, 9.1, 9.2
Korea Marine Environment Management Corporation (KOEM), Seoul, Korea http://www.emc.or.kr	Habitat Protection, Restoration and Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • MPA development and management • Coastal and marine water quality management • Climate change assessment and adaptation • Oil spill training and response 	Outputs 4.4, 6.1, 6.2, 7.1, 9.1
Korea Maritime Institute, Seoul, Korea http://www.kmi.re.kr/kmi/kr/	Water Use and Supply Management Pollution Reduction and	<ul style="list-style-type: none"> • National and coastal ocean policies • Total pollution loading assessments 	Outputs 1.1, 1.2, 6.1, 6.2

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
	Waste Management	<ul style="list-style-type: none"> Technology development for pollution reduction 	
Marine Science Institute, University of the Philippines, Manila, Philippines http://www.msi.upd.edu.ph/	Habitat Protection Restoration and Management Pollution Reduction and Waste Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> Coral reef ecology EAFM Biophysical assessments and monitoring including MPA management effectiveness assessment tool (MEAT) Environmental monitoring training and capacity building Vulnerability assessments 	Outputs: 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 7.1, 9.1
Oil Spill Response, Ltd (OSRL), Singapore www.oilspillresponse.com	Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> Satellite imagery Environmental sensitivity mapping Oil spill contingency planning Shoreline clean up assessment Oil spill management and post-spill management 	Output 7.1
Plymouth Marine Laboratory (PML), Plymouth, United Kingdom www.pml.ac.uk/	Habitat Protection Restoration and Management Water Use and Supply Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> Biodiversity, marine ecology and molecular science in support of ecosystem services Targeted research (e.g. impact of climate change on fisheries, ocean acidification etc) 	Outputs 4.3, 4.4, 5.1, 7.1
Regional Fisheries Livelihoods Programme (FAO /AFID supported and now completed), Bangkok, Thailand www.rflp.org	Food Security and Livelihood Management	<ul style="list-style-type: none"> Best practice in small scale fisheries of Sulu Sulawesi Marine Eco-Region Gender equality Microfinance and sustainable livelihoods Maritime safety and reducing vulnerability 	Outputs 5.1, 5.2, 7.1, 8.1
Southeast Asia Climate Change Network (UNEP-supported), Bangkok, Thailand www.unep.org/climatechange/mitigation/sean-cc/	Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> Formulation of low carbon policies and initiatives Mainstream CCA / DRR strategies Innovative economic and financing options 	Outputs 7.1, 8.1
South East Asia Fisheries Development Center (SEAFDEC), Bangkok, Thailand www.seafdec.org	Food Security and Sustainable Livelihood Management	<ul style="list-style-type: none"> Community-based fisheries management Sustainable livelihoods for coastal fishing communities 	Outputs 5.1, 5.2
The Economics of Ecosystems and Biodiversity (TEEB)-UNEP www.teebweb.org/	Habitat Protection Restoration and Management Water Use and Supply Management Pollution Reduction and Waste Management	<ul style="list-style-type: none"> Valuation of economic benefits for oceans and coasts, water and wetlands Innovative economic and financial instruments 	Outputs 2.3, 2.4, 5.1, 6.1, 6.2, 8.1
The World Bank	Habitat Protection	<ul style="list-style-type: none"> Markets for environmental 	Outputs 2, 4.4, 6.1, 6.2

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
http://web.worldbank.org/	Restoration and Management Pollution reduction and waste management Natural and Man-Made Hazard and Prevention Management	public goods <ul style="list-style-type: none"> Assessment of vulnerability and adaptation needs Pollution reduction policy and mitigation technologies 	and 7.1
Third Institute of Oceanography, Xiamen, China www.tio.org.cn	Habitat Protection Restoration and Management	<ul style="list-style-type: none"> Basic ecological surveys and baseline assessments (e.g. MPAs) Economic valuation of ecosystems services Land-sea use planning 	Output 5.1
UNDP/GEF www.undp.org/gef	Habitat Protection Restoration and Management Pollution reduction and waste management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> Biodiversity mainstreaming Sustainable financing of MPAs MPA management effectiveness and networking Water governance Pollution abatement Alternative livelihoods Integrated multi-trophic aquaculture 	Outputs 4.1, 4.2, 4.4, 5.1, 5.2, 6.1, 6.2 and 7.1
UNDP/GEF Small Grants Programme (SGP)	Habitat Protection Restoration and Management Water Use and Supply Management Pollution Reduction and Waste Management Food Security and Sustainable Livelihoods Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> Implementation of the existing MOU between UNDP/GEF SGP and PEMSEA Community-based projects developed and conducted by CBOs in partnership with PEMSEA and local governments implementing ICM programs CBO initiatives with SGP support directly contribute to the objectives and targets identified in the coastal strategies/coastal strategy implementation plans of local governments 	Project-wide
UNEP/GEF http://www.unep.org/dgef/	Habitat Protection Restoration and Management Pollution reduction and waste management	<ul style="list-style-type: none"> Strengthening enabling environment Ecosystem services valuation Environmental assessment Nutrient management 	Outputs 4.4 and 6.1 and 7.1
UNEP- Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) www.gpa.unep.org	Pollution Reduction and Waste Management	<ul style="list-style-type: none"> Nutrient management 	Outputs 6.1, 6.2
WorldFish Centre, Penang,	Food Security and	<ul style="list-style-type: none"> Reefbase and Fishbase 	Outputs 5.1, 5.2, 7.1,

Partner/Collaborator	Thematic Area	Tool Kits / Approaches to be Considered	Corresponding Output/Activity Sets
Malaysia www.worldfishcenter.org	Livelihood Management Natural and Man-Made Hazard and Prevention Management	<ul style="list-style-type: none"> • Spatial mapping • Improving fisheries value chains/microfinance • Strengthening resilience to climate change • Small scale aquaculture • Innovative economic and financing instruments 	8.1

OUTCOME 4: INCREASED AREAL EXTENT OF HEALTHY, RESILIENT HABITATS (I.E., BLUE FORESTS), INCLUDING MANGROVES, CORAL REEFS, SEA GRASS AND OTHER COASTAL HABITATS/ AREAS

Output 4.1 ICM program coverage extended to 20 percent (45,000 km) of the region’s coastline, with scaled-up national and local ICM program implementation in 8 participating countries

ICM is a systematized approach to governance and sustainable development and management of coastal and marine areas. ICM facilitates coordinated actions at the regional, national and local levels to address challenges in protecting and securing an ocean-based blue economy. The information presented in Section 1 above, suggests that countries are progressing towards the SDS-SEA target of at least 20% of the region’s coastline under coverage of ICM programs by 2015. Currently, nearly 12% of the region’s coastline is covered by ICM programs, and it is apparent that Countries and their Partners need to exert greater effort if this milestone is to be achieved. Specifically, Table 11 highlights the individual and collective commitments of the participating countries under this GEF/UNDP project to contribute to the 20% regional target while achieving their respective priorities with regard to coastal and ocean management through national ICM programs.

PEMSEA has enhanced its capacity development programs to support the demands of countries for skilled human resources, tools, instruments and services, to further facilitate the development, implementation and replication of ICM programs. Efforts towards achieving this outcome will focus on preparation and facilitation of the adoption and implementation of national ICM programs in the eight (8) participating countries.

Table 11 illustrates where ICM coverage will be applied to achieve the 20% regional target. It should be noted that in order for a site/location/length of coastline to be considered “under ICM coverage”, and number of minimum performance indicators would have to be evident. These include:

- Institutional arrangements and coordinating mechanisms in place;
- Coastal strategy/coastal strategy implementation plan adopted, legitimized and being implemented;
- SOC or related M&E system established;
- Local and/or national governments committing human and financial resources and related investments to implement the coastal strategy; and
- Capacity building programs/training of ICM managers and practitioners developed and initiated

The general approach to develop and implement an ICM program at the local government level entails following the step-wise ICM cycle (Figure 7), with due consideration to local conditions. An

assortment of specific tools is applied to undertake analysis, generate information, and develop and implement policies, legislation and strategic action plans. Much of the details including various technical and management tools are given in Chua (2006). The key “stages” in developing an ICM program are as follows:

Stage 1. Preparing

The preparatory stage is designed to achieve the following: (a) establishment of an ICM project coordinating mechanism; (b) confirmation of the management boundary to be covered by the ICM initiative (local government operates within a clear jurisdictional boundary, such as a coastal district, municipality, city or province); (c) confirmation of local government commitments to undertake the ICM project; (d) identification of core budget for project office operation; (e) assessment of the level of support and resistance from government agencies and key stakeholders, including the corporate sector, private sector and business community; (f) assessment of the availability of human resources and local institutions with management and technical skills; (g) establishment of a stakeholders' consultation mechanism; (h) training of core staff; and (i) establishment of monitoring and assessment protocol.

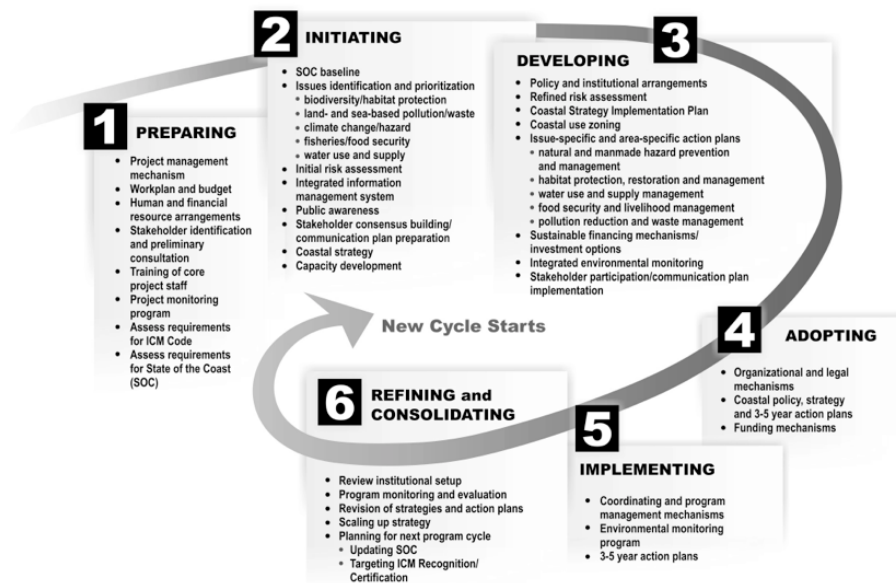


Figure 7. ICM Project Development and Implementation Cycle

Stage 2. Initiating

The initiating stage lays down the strategies for management actions by: (a) undertaking the preparation of a scoping document detailing the socio-economic, ecological, political and cultural characteristics of the target area, normally presented in the form of a baseline coastal profile or SOC report; (b) identifying issues affecting sustainable coastal and marine development; (c) commencing analysis of initial risks and prioritizing them; (d) finalizing the scoping document for the preparation of a long-term coastal strategy and strategic action programs; (e) setting up the Integrated Information Management System (IIMS) to gather, utilize and store data for future use; and (f) preparing the ground work for stakeholders' consensus building as well as continuing with the efforts of building local capacity.

Stage 3. Developing

The developing stage is aimed at achieving the following: (a) a functional interagency coordinating committee directly under the local administration; (b) completion of a refined risk assessment, including ecosystem and human health risks; (c) development of a common vision and mission of the ICM program; (d) formulation of a comprehensive, time-bound Coastal Strategy Implementation Plan (CSIP), including coastal zoning or marine spatial zoning, monitoring, information management and communication plans; (e) initiation of primary data gathering for subsequent analysis on the effectiveness of coastal governance and management measures; and (f) the development of a sustainable financing mechanism to launch and operate ICM-related programs.

Stage 4. Adopting

The adopting stage is as critical as the previous two stages as it prepares for the adoption of the ICM program and for sustaining its implementation. The key efforts at this stage are to convince the major stakeholders of the potential benefits from the implementation of the ICM program and to persuade relevant government agencies of the benefits they could share by pooling human and financial resources. Securing the acceptance of concerned agencies and stakeholders, including the private sector contributes to the approval of the ICM program by the local government. Major outputs include the following: (a) approval of the CSIP with budgetary allocations; (b) a new policy or legislative instrument in support of the ICM program, if any; and (c) identification of new funding sources from the public and private sectors.

Stage 5. Implementing

The implementation stage of the ICM program requires the following key elements: (a) strong coordination to ensure cost effectiveness in program plan implementation; (b) application of technical and management skills to implement various time-bound action plans in meeting specific goals and targets in the coastal strategy/coastal strategy implementation plan; (c) buy-ins from concerned line agencies and stakeholders, including the private sector; (d) continuous communication to keep the public informed of progress; and (e) committed and strong leaders with interpersonal skills to facilitate, moderate, and negotiate the implementation of various activities, as well as the ability to apply adaptive management. The physical and issue coverage of action plans may vary from site to site depending on priority, available resources and capacities, and timeframe.

Stage 6. Monitoring, evaluating and reporting

The sixth stage of the ICM program cycle consists of 3 sub-stages, which are sequential: monitoring, evaluation and reporting. These sequential sub-stages, moreover, are continuous activities throughout the process of ICM development and implementation. This stage is aimed at ensuring the ICM process is faithfully followed; outputs and outcomes are to be evaluated and reported in a form that can be easily visualized and understood by policy makers and the general public. The second State of the Coasts (SOC) report is employed a comprehensive account released after the completion of the first ICM cycle. It can be periodically updated after the completion of each ICM cycle. A guidebook for the preparation of the SOC has been prepared and will be utilized during the project (PEMSEA, 2011).

All sites identified in Table 11 will follow the ICM cycle for developing and implementing their respective ICM programs, with the objective of establishing the SD Framework for Coastal and

Marine Areas (Figure 4) at each location, the objectives and rationale of which were discussed in Part 1.

Creating partnerships and investment opportunities is part and parcel of the ICM program development and implementation process. The ICM approach helps to establish a policy environment that encourages various stakeholders from different sectors of society to work in partnership to address issues of mutual concern. The ICM process emphasizes stakeholder consultation, awareness and consensus building, as well as shared responsibility in planning and decision-making. In this way, it creates an atmosphere for ownership. Concerned users are brought together to plan, develop and implement long-term uses of marine and coastal resources in order to provide a “win-win” scenario for local government, the private sector and civil society.

As delineated under Outcome 1, this project will focus on a more systematic approach to further engaging the private sector as a partner and catalyst for scaling up ICM programs at the national and local levels, as well as for leveraging environmental investments. As noted above, Stage 1 of the ICM process delineates key players, including the private sector at the national and local levels, and their level of interest and support for ICM development and linkages to the blue economy. Each successive stage of the process is designed to create interactions and build ownership among the stakeholders.

Building the business case for ICM will be brought to the fore as part of this project. The current trend of CSR is that corporations have become concerned not only with profits but with their contribution to society. Corporations now consider the total economic value of their CSR projects and try to quantify the impacts that could be shown in financial statements or sustainability reports. In the Philippines, for example, corporations are setting aside 0.05 to 1.3 percent of their annual total revenues for community investments, which in absolute terms amounts to millions of dollars.

To persuade corporations to use of these funds for ICM requires that they understand that involvement in ICM projects can enhance their perceived social license to operate, decrease regulatory risks, and benefit from the sharing of resources, opportunities and risks in social and environmental investments. For example, the business case will entail collecting, packaging and sharing evidence from previous PEMSEA experiences, which emphasizes the following points:

- ICM exposes corporations/businesses to multisectoral partnerships, not just local government or civic society, but all stakeholders allowing corporations to reach a wider audience and have a comprehensive awareness in the country and the region
- ICM offers a wide range of blue economy issues and investment opportunities, such as biodiversity conservation, sustainable fisheries, waste and water management, alternative energy sources, reforestation, and restoration of ecosystems. This gives a wide range of areas for CSR programs, thereby corporations can choose from several possible CSR projects at the local level depending on their business focus
- Corporations can play a catalytic role in supporting ICM development and implementation, providing technical, management and financial assistance to local governments in order to leverage their interest and commitment in scaling up ICM programs, thereby helping countries achieve the target of 20% ICM coverage of the region’s coastline
- Corporations can also play an important catalytic role in contributing to national and global goals associated with the World Summit on Sustainable Development (WSSD) and Rio +20 in response to the “Global is Local, Local is Global” tenet, through on-the-ground investments with local governments as partners

- ICM provides the opportunity for the corporate sector to align their programs with the goals and programs being implemented by local governments, thereby facilitating common objectives that will produce long-term results
- CSR and ICM augur well with the economic progress in the East Asian Seas region as businesses see vast growth potentials in the region and with their increasing focus on sustainability, the ICM approach offers a good pathway that safeguards companies from making the same mistakes of implementing unsound corporate practices as in the past
- The ICM approach offers synergistic solutions with the CSR objectives of the private sector and the development goals of the public sector.

The establishment of national and regional CSR networks have been explained under Outcome 1. As part of the ICM implementation component of this project, Outcome 4 will address the engagement of these corporate networks in priority programs of the SDS-SEA, including scaling up ICM programs, marine spatial planning, economic valuation of ecosystems, sustainable fisheries, biodiversity conservation, alternative livelihoods, climate change adaptation, natural and man-made hazard reduction, and smart ocean and smart coastal industries. Activity 4.1.6 (below) is designed to initiate the process of developing cross-sectoral business alliances on marine and coastal sustainable development that the corporate networks can build on and sustain beyond the project.

Activities for Output 4.1 (which will be adapted in accordance with site-level capacities and priorities)

4.1.1. Develop agreements / coordinating arrangements with concerned national agencies and local governments for scaling up ICM implementation to cover at least 20% of the region's coastline, as measured at the regional and national levels, by the end of project.

4.1.2. Complete scoping studies / needs assessments at national and local levels for achieving the regional and national targets.

4.1.3. Organize ICM capacity enabling/technical support services and networks in each participating country on the application of the ICM cycle and the corresponding tools and processes, as appropriate, including ICM Learning Centers, National/Regional Task Forces, Regional Centers of Excellence, CSR Networks, etc.

4.1.4. Train and establish a core group of experienced national and local government personnel and stakeholders among the sites identified in Table 11, with the capacity to manage and coordinate the development and implementation of ICM programs.

4.1.5. Promote and facilitate the adoption and implementation of PEMSEA's IIMS and State of Coasts Reporting System and test, refine and roll-out the ICM Code and Recognition System among national and local governments implementing ICM programs.

4.1.6. Organize and conduct ICM forums, workshops, roundtables and other information-sharing/partnership development events focused on developing a business case that will engage CSR networks and other private sector groups to participate in the development and implementation of ICM programs and associated investments, in collaboration with national and local governments, with particular emphasis on priority ICM sites and issues and identified in Tables 11 to 17.

Table 11. Geographic Scaling up of ICM Programs to cover 20% of the EAS region's coastline

Country (Length of total national coastline, excluding some associated islands; Total number of ICM sites)	Existing ICM Programs / Sites	Length of Coastline (km) (percentage of total national coastline)	Proposed New ICM Programs / Sites	Length of Coastline (km) (Percent of country's total coastline)	SUBTOTALS
Cambodia (440 km) 4 provinces	Preah Sihanouk	140.5			
			Koh Kong	206.5 ⁴²	
			Kep	26.5	
			Kampot	66.5	
SUBTOTALS		140.5 (32%)		299.5 (68%)	440 (100%)
China (32,000 km) 19 provinces/zones	Dongying	350	Yuhan	329	
	Fangchenggang	584	Changyi	53	
	Haikou	136.23	Wenzhou	339	
	Leting	98	Zhanjiang	1,556	
	Lianyungang	204.82	Rudong	104	
	Panjin	118	Zhaoan	88	
	Qingdao	863	Zhoushan	300	
	Quanzhou	541	Sanya	260	
	Wenchang	278.5			
	Xiamen	234			
	Yiangjiang	477			
SUBTOTALS		3,844.55 (12.1%)		3,029 (9.5%)	6,913 (21.6%)
DPR Korea ⁴³ (2,880 km) 1 city	Nampho City	127 (4.41%)			
SUBTOTALS		127 (4.41%)			127 (4.41%)

⁴² Koh Kong and Sihanoukville have a combined coastline total of 347 km, however provincial coastlines for both provinces have not been officially declared by the government based on adjustments of provincial boundaries done in 2008. Baseline information is as of 2007, prior to the delineation of new boundaries in 2008.

⁴³ DPR Korea is a PEMSEA Partner Country. ICM activities undertaken by PEMSEA in partnership with DPR Korea are on a cost-sharing basis, using non-GEF funds.

Country (Length of total national coastline, excluding some associated islands; Total number of ICM sites)	Existing ICM Programs / Sites	Length of Coastline (km) (percentage of total national coastline)	Proposed New ICM Programs / Sites	Length of Coastline (km) (Percent of country's total coastline)	SUBTOTALS
Indonesia ⁴⁴ (95,161 km) 30 provinces	Bali	430	Aceh	2,667.27	
	Sukabumi	117	North Sumatra	1,300	
	Tomini Bay	2,500.46	Riau Islands	1,390.14	
	Jakarta Bay	72	Jambi	236	
	15 provinces / 42 coastal districts (MCRMP) 8 provinces/17 regencies/islands (COREMAP I and II) Bontang, East Kalimantan CTI sites in 3 islands, ATSEA sites in 4 provinces, BOBLME sites in 5 provinces, Sulu-Sulawesi Marine Ecoregion sites in 2 districts	To be confirmed	South Sumatra	570.14	
			Bangka Belitung	1,296.75	
			Lampung	962.17	
			Banten	449.62	
			West Java	816.82	
			East Java	1,900	
			Gorontalo	655.80	
			North Sulawesi	1,837.29	
			Central Sulawesi	4,013	
			Jakarta ⁴⁴	72	
			Riau ³	2,020.48	
			West Sumatera	1,973.25	
			Central Java	746.05	
			West Nusa Tenggara	2,333	
			South Sulawesi	1,937	
SUBTOTALS		3,047.46 (3.2%)		27,176.78 (28.56%)	27,606.78⁴⁵ 29.01%
Japan (35,000 km) 5 sites	<ul style="list-style-type: none"> • Bizen City • Miyako City • Obama City • Shima City • Sukumo City and Otsuki Town 	To be confirmed			
Malaysia ⁴⁶	Port Klang		Northern Selangor		

⁴⁴ Except for Riau and Jakarta, all coastline data are from the "Statistics of Marine and Coastal Resources 2012" published by the Badan Pusat Statistik – Statistics Indonesia.

⁴⁵ The total coastline represents the provincial coastline of Bali (existing site) and the total provincial coastline for the new/proposed sites, which already include the coastline of existing regency/district level ICM sites.

Country (Length of total national coastline, excluding some associated islands; Total number of ICM sites)	Existing ICM Programs / Sites	Length of Coastline (km) (percentage of total national coastline)	Proposed New ICM Programs / Sites	Length of Coastline (km) (Percent of country's total coastline)	SUBTOTALS
(5,087.5 km) 1 state (5 districts)	<ul style="list-style-type: none"> • Klang • Kuala Langat 	76 80	<ul style="list-style-type: none"> • Sabak Bernam • Kuala Selangor Southern Selangor • Sepang 	60 60 15	
SUBTOTALS		156 (3.06%)		135 (2.65%)	291 (5.71%)
Philippines (36,289 km) 27 provinces	Batangas	492	Sarangani Bay <ul style="list-style-type: none"> • Maitum • Kiamba • Alabel • Malapatan • Maasim • General Santos City • Glan 	25 39.6 12.1 15.3 43.1 27 64.3	
	Boracay Island	7	Mindoro Oriental: <ul style="list-style-type: none"> • Calapan City • Puerto Galera • San Teodoro • Naujan • Baco • Pola • Pinamalayan 	25.63 44.84 11.98 25.93 10.48 31.39 19.75	
	Camiguin	55	Mindoro Occidental: <ul style="list-style-type: none"> • Abra de Ilog • Paluan • Lubang • Looc 	35.11 96.83 58.74 125.70	
	Guimaras	470.3	Marinduque: <ul style="list-style-type: none"> • Mogpog 	36.27	

⁴⁶ ICM activities undertaken by PEMSEA with local governments in Malaysia are funded on a cost-sharing basis in partnership with the respective local governments, using non-GEF funds.

Country (Length of total national coastline, excluding some associated islands; Total number of ICM sites)	Existing ICM Programs / Sites	Length of Coastline (km) (percentage of total national coastline)	Proposed New ICM Programs / Sites	Length of Coastline (km) (Percent of country's total coastline)	SUBTOTALS
			<ul style="list-style-type: none"> Boac Gasán Buenavista 	14.46 27.82 20.47	
	Ilocos Coast (Ilocos Norte, Ilocos Sur, La Union, Pangasinan)	652	Aurora	332	
	Manila Bay (Bataan, Cavite, Bulacan, Pampanga)	318	Siargao Island <ul style="list-style-type: none"> Del Carmen Pilar San Benito San Isidro 	57.27 14.02 No data 5.33	
	Macajalar Bay	176			
	Tayabas Bay (Quezon side)	305.7			
	ICRMP <ul style="list-style-type: none"> Cagayan Cebu Davao Oriental Masbate Romblon Siquijor Zambales 	1,057 868 460 781 384 86 272			
	SUBTOTALS	6,384.00 (17.6%)		1,220.42 (3.36%)	7,604.42 (20.96%)
RO Korea (13,509 km)		11,915 (88.2%)			
Singapore (182.4 km)		182.4 (100%)			
SUBTOTALS (RO Korea and Singapore)		12,097.40			12,097.40 88.36%
Thailand (3,148 km inclusive of	Chonburi Province	171.78	Inner Gulf of Thailand <ul style="list-style-type: none"> Samut Sakorn 	42.79	

Country (Length of total national coastline, excluding some associated islands; Total number of ICM sites)	Existing ICM Programs / Sites	Length of Coastline (km) (percentage of total national coastline)	Proposed New ICM Programs / Sites	Length of Coastline (km) (Percent of country's total coastline)	SUBTOTALS
islands) ⁴⁷ 15 provinces			<ul style="list-style-type: none"> • Chachoengsao • Samut Prakarn • Bangkok • Samut Songkram • Petchaburi 	16.28 50.20 5.81 25.20 91.73 (232.01)	
			Eastern Thailand <ul style="list-style-type: none"> • Rayong • Trat • Chanthaburi 	104.50 184.30 102.25 (391.05)	
			Middle Gulf of Thailand: <ul style="list-style-type: none"> • Chumphon • Prachuap Khirikhan • Surat Thani 	247.75 246.75 166.38 (660.88)	
			Lower GOT: <ul style="list-style-type: none"> • Songkhla • Nakhon Sithammarat 	157.90 244.99 (402.89)	
TOTALS		171.78 (5.46%)		1,686.83 (53.58%)	1,858.61 (59.04%)
Timor Leste (735 km) 3 districts	Manatuto District	62.00			
	Liquica District	80.00			
			Dili District	102.36	
TOTALS		142.00 (19.3%)		102.36 (13.93%)	244.36 (33.25%)
Vietnam (3,269 km)	Ba Ria –Vung Tau	305	Nghe An	82	
	Danang	92	Quang Ngai	130	

⁴⁷ Based on most recent data from DMCR.

Country (Length of total national coastline, excluding some associated islands; Total number of ICM sites)	Existing ICM Programs / Sites	Length of Coastline (km) (percentage of total national coastline)	Proposed New ICM Programs / Sites	Length of Coastline (km) (Percent of country's total coastline)	SUBTOTALS
12 provinces	Haiphong	125	Kien Giang	206	
	Nam Dinh	72	Khanh Hoa	385	
	Quang Nam	125			
	Quang Ninh	270			
	Soc Trang	72			
	Thua Thien Hue	128			
TOTALS		1,189 (36%)		803 (24.56%)	1,192 (60.94%)
GRAND TOTAL (227,701 km)		27,299.69 (approximately 12%)		34,452.89 (approximately 15%)	58,374.57 (approximately 25%) ⁴⁸

⁴⁸ Estimated using the total regional coastline based on national coastlines of 12 countries included in the table.

Output 4.2 Increased proportion of coastal areas have zoning schemes, marine spatial plans, PAs/MPAs, EAFM and other management processes in place and functioning effectively as part of ICM programs

Scaling up ICM refers to three different contexts: (1) geographic expansion; (2) functional expansion; and (3) temporal expansion (Chua, 2006). Geographically, a management area can expand from a single community or municipality to the entire province or state. Scaling up ICM functionally involves taking into consideration new program interventions, such as linking coastal management with watershed and river basin management, biodiversity conservation, sustainable fisheries, etc. Finally scaling up temporally can include a shift from focusing solely on solving immediate issues like pollution reduction or waste management, to considering and incorporating medium- and long-term issues into ICM programs, such as climate change, sea-level rise and building an ocean-based blue economy.

As ICM scales up across the EAS region, a number of additional management tools and processes come into play to address the different challenges to protecting and sustaining coastal and marine ecosystem products and services. These tools and processes contribute to improved planning and decision-making and strengthening the effectiveness of management interventions. The tools are not a substitute for the ICM process and tools, but rather will build upon the governance and integrated management framework and foundation established by ICM.

The ICM sites identified in Table 11 have a variety of key concerns that will be addressed under scaled-up ICM programs, including: habitat restoration and biodiversity conservation (Table 12); MPA/MPA networking (Table 13); sustainable fisheries (Table 14); alternative/sustainable livelihoods (Table 15); water use and conservation/pollution reduction (Table 16); natural and manmade hazards (Table 17); and application of innovative economic and investment instruments (Table 18).

For example, one element of work under Output 4.2 entails the wider application of coastal use zoning (CUZ)/marine spatial planning (MSP) as a tool in support of planning and management of coastal and marine areas and resources. Through ICM application, this project will incorporate many of the lessons and approaches that are inherent in the recent guidance published by the Secretariat of the CBD and STAP⁴⁹, and will provide some added focus in the following areas:

- a. Increasing clarity on how CUZ/MSP or other relevant approaches, complement rather than replace ICM and community-based management;
- b. Harmonizing access to marine space by established economic sectors such as fisheries, oil and gas, pipes and cables, shipping and navigation;
- c. Assessing costs and benefits in order to clearly understand full trade-offs; and
- d. Extending governance principles to be more inclusive of weaker, disadvantaged sectors, addressing issues of tenure and user-based access rights.

Output 4.2 will also focus on identifying, adapting, applying, evaluating and sharing methodologies for improving the management effectiveness of PAs/MPAs, EAFM, IRBCAM and other management tools and processes in support of ICM scaling up among the new ICM sites, thereby increasing the proportion of coastal areas and local governments applying such schemes. In addition, best practices in application of these management tools and processes will

⁴⁹ Secretariat of the Convention on Biological Diversity and the Scientific and Technical Advisory Panel — GEF (2012). *Marine Spatial Planning in the Context of the Convention on Biological Diversity: A study carried out in response to CBD COP 10 decision X/29*, Montreal, Technical Series No. 68, 44 pages.

be packaged and shared among national and local governments and other stakeholders in order to promote and facilitate improved policies and decision-making with regard to investments in sustaining marine and coastal ecosystem products and services (i.e., Component 3) across the region.

Activities for Output 4.2

4.2.1. Conduct regional partners' workshops to review, adapt and agree on the tools, approaches and indicators to be applied in the planning, development, implementation and monitoring of conservation-focused ICM projects, including the delineation of SMART indicators to measure progress in habitat restoration and biodiversity conservation, MPA/MPA networking, sustainable fisheries, alternative/sustainable livelihoods, water use and conservation/pollution reduction, natural and manmade hazards, and application of innovative economic and investment instruments.

4.2.2. Establish and support pilot projects at selected ICM sites in each participating country, (Tables 12-18), to demonstrate the planning and operationalization of zoning schemes / MSPs, PA/MPA, EAFM and IRBCAM, and other relevant management tools and processes within the context of ICM programs at the identified sites. Lessons learned and best management practices will be transferred from other projects and programs that are being implemented by partners and collaborators identified in Table 10, including the UNDP-GEF projects, some of which are identified in Table 26, to the selected ICM sites, as appropriate.

4.2.3. Monitor and assess the scope (i.e., increased proportion of coastal areas benefiting from the management schemes) and benefits derived from the management interventions, including management effectiveness, as well as social, economic and ecological benefits, using agreed methodologies and indicators.

4.2.4. Promote and facilitate the replication of best practices and lessons learned from the pilot sites, including development and strengthening of national and local policies and legislation covering the management processes.

4.2.5. Organize and conduct special skills training programs⁵⁰ for ICM practitioners and managers, as well as ICM seminars for planners and decision-makers, in collaboration with national and local governments, the PNLG and other collaborating projects and programs, to promote best practices and lessons learned from pilot demonstration sites, and to facilitate increased investment in conservation measures and initiatives as part of national ICM programs.

4.2.6. Mobilize the regional and national support networks to assist local governments with the start-up/scaling up of ICM programs, including preparation of baseline SOC reports on existing social, economic and ecological conditions and threats/risks.

4.2.7. Assist local governments with the preparation of end-of-project SOCs, including social, economic and environmental changes and trends, and the effectiveness of management interventions.

⁵⁰ A number of different tools and approaches will be considered, tested, applied and possibly adapted to suit EAS conditions, including the Marine InVEST, which has been piloted to date in the North American context.

Output 4.3 Measureable improvements in the areal extent, health and resiliency of habitats in coastal waters and watershed areas including biodiversity hotspots and areas-at-risk to climate change

The ICM scaling up component of the project converges sectoral initiatives and programs for climate change adaptation and disaster risk reduction, conservation and redress of biological diversity and equitable and sustainable fisheries including food security and livelihoods, and protecting and improving water quality and addressing hazards associated with unsustainable development in terms of both water quality and quantity. In order to ensure that progress is being made in ICM implementation, a number of tools need to be developed/adapted and applied on-the-ground with local governments in order to track and record improvements to ecosystem conditions and services. Some of these tools include:

- a. Ecosystem valuation. The concept of total economic value (TEV) defines the extent of goods and services, including non-use services that a natural resource provides to society. These are usually expressed in monetary terms that an individual or society is willing to pay for a good or service or the amount of money an individual or society is willing to accept as compensation not to use the good or service. Valuation studies will define and quantify the array of benefits flowing from a natural ecosystem, with local and global benefits, and how;
- b. Risk/vulnerability assessments. Environmental risk assessment provides the basis for identifying and prioritizing risk as a result of human activity and their effect on ecosystems and human health. Integrated with vulnerability assessments, practitioners are able to identify on-going and potential natural and man-made hazards, and associated levels of social, economic, ecological and physical vulnerability. Accurate assessments would lead to better design of mitigation measures; and
- c. Monitoring and evaluation systems. Establishment of an M&E system will require development of appropriate or customized indicators which can be used to track/measure progress.

Efforts will support the integration of sustainable use of coastal and marine ecosystem services into ICM programs in biodiversity hotspots, using a range of tools and approaches in collaboration with partners identified in Table 10 (i.e., CCRES; IUCN-ARO; MSI; TEEB; EEPSEA). Pilot demonstration projects will be set up in the priority sites/habitats listed in Table 12, and will entail the following activities:

Activities for Output 4.3

4.3.1. Conduct baseline assessment and valuation studies on the ecosystems' products and services in selected sites in Table 12 with a focus on mangroves, coral reefs and seagrass habitats, using methodologies and indicators as agreed under Output 4.2, (e.g., "healthy habitat" reporting system/SOC with stress reduction indicators, impact indicators, etc.).

4.3.2. Support risk/vulnerability assessments of the coastal habitats at the sites (i.e., blue forests) and coastal communities, including threats from conflicting uses and anthropogenic and natural hazards (e.g., oil spills, climate change).

4.3.3. Identify and prioritize issues, threats, priorities and goals of improvements in the areal extent, health and resiliency of the identified habitats in coastal waters and watershed areas of the sites in Table 12, in collaboration with the concerned local governments, coastal communities and other stakeholders.

4.3.4. Develop a conservation-focused coastal strategy/coastal strategy implementation plan, including priority actions, coordinating mechanisms, roles and responsibilities of stakeholders, budget and resource allocations, financing mechanisms (including a ‘blue carbon’ component, drawing from the best available and emerging blue carbon methodologies), and indicators and benchmarks for measuring improvements in the health and resiliency of the habitats and the impacts and benefits to be derived.

4.3.5. Launch the conservation-focused pilot demonstration projects, including required training programs and communication plans designed to build awareness and facilitate local government, coastal community and stakeholders’ awareness and ownership of the program.

4.3.6. Implement local government and coastal community monitoring and reporting systems to track indicators of ecosystem health and resilience, i.e., a healthy habitat reporting system, as agreed in Activity 4.3.1.

4.3.7. Prepare an updated ecosystem health report card/SOC report after 3 years of operation, to evaluate the progress, achievements and shortcomings of the conservation-focused ICM pilot demonstration, with the objective of improving and adopting the implementation plan, and scaling up the scope of the plan to cover a greater proportion of coastal habitats within the jurisdiction of the local governments.

4.3.8. Develop/package relevant knowledge products and convene national and regional technical workshops to inform decision-makers and disseminate information on best practices.

Table 12. Proposed Sites for habitat restoration and biodiversity conservation

Country	Priority Site(s)**	Replication Site(s)	Indicators*/Expected Project Outcome
Cambodia	Kampot Province	Koh Tunsay, Kep Province Prek Tanout, Kampot Province Andong Tek and Thmor Sor, Koh Kong Province Koh Rong and Koh Rong, Sanlem Sihanoukville Pouy Tamong, Preah Sihanouk	Extent of seagrass restoration (ha) • 200 ha of sea grass area restored (Kampot)
China	Fangchenggang	Quanzhou Yangjiang Panjin	Extent of mangrove rehabilitation (ha) • 200 ha of damaged mangrove area rehabilitated (Fengchengganag)

Country	Priority Site(s)**	Replication Site(s)	Indicators*/Expected Project Outcome
	Changyi		Extent of coastal vegetation and seaweed restoration (ha) • 220 ha of damaged seaweed area rehabilitated (Changyi)
Indonesia	Muara Angke, Jakarta Bay Gorontalo, Tomini Bay Pelabuhanratu Bay, Sukabumi	Tangerang, Banten (first pilot site for Rantai Emas Program) Other sites for Rantai Emas Program (Thousand Islands in Jakarta Bay, East Java and Central Java) Raja Ampat, Papua	Extent of mangrove and coral reef rehabilitation (ha) • 2.5 ha of damaged mangrove rehabilitated (Muara Angke) • 26 ha of damaged mangrove rehabilitated (Gorontalo) • 2 ha of sea turtle breeding area rehabilitated and protected (Pelabuhanratu Bay)
Philippines	Batangas Province (Balayan, Batangas and Tayabas Bays)		Extent of rehabilitation of important habitat and ecosystems (ha) • 50 ha of mangroves, sea grass, coral reefs and wetlands rehabilitated (Balayan and Tayabas Bays)
Thailand	Tao Island Group		No baseline data available Coral reef protection and rehabilitation plan, developed, adopted and initiated
Timor Leste	Manatuto District	Liquica	No baseline data available Mangrove protection and rehabilitation plan, developed adopted and initiated
Vietnam	Soc Trang	Nghe Anh	Extent of mangrove rehabilitation (ha) • 500 ha of damaged mangrove rehabilitated

* Indicators based on PEMSEA's Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

** These sites/habitats are linked to Output 8.1, "Innovative economic and investment mechanisms tested and applied...", including opportunities for the ICM sites and stakeholders to secure recurrent financial inflows via verified carbon credits.

Output 4.4 Strengthened MPAs functioning effectively in priority coastal and marine biodiversity areas, demonstrating improved management effectiveness, sustainability and benefits

All PEMSEA participating countries are signatories to the Convention on Biological Diversity (CBD), and as such have entered into commitments to achieve relevant targets. A CBD review of National Biodiversity Strategic Action Plans (NBSAPs), country-level reports and Programmes of Work on Protected Areas (PoWPAs) confirms that targets for coastal and marine areas are not being met. The review provides guidance on where continued efforts should be directed. These are briefly summarized below:

- a. Increase emphasis on links to food security, ecosystem based adaptation to climate change and human welfare;
- b. Establish more trans-boundary, integrated or networked MPAs to foster biodiversity corridors;
- c. Strengthen comprehensive monitoring and tracking systems with links to sustainable financing;
- d. Recognize and quantify the role of MPA habitats in carbon storage and identify opportunities for climate change adaptation and mitigation;
- e. Reinforce partnerships and participation around protected areas, including indigenous communities;
- f. Advance efforts to determine economic value of ecosystem services from protected areas, and understand distribution of benefits;
- g. Pay attention to targets for endangered and endemic species by ensuring accurate and timely data management using standardized approaches;
- h. Adapt and align monitoring and reporting systems, with emphasis on improving quality of outcomes, governance and integration of local knowledge; and
- i. Strengthen and accelerate knowledge management efforts, including internalization of lessons learned and best practices, with special attention to law enforcement.⁵¹

In connection with the above, and in order to help PEMSEA participating countries jointly achieve SDS-SEA and Aichi Biodiversity targets, the project will focus on strengthening the effectiveness of conservation areas and protection of threatened species, using ICM as the overarching framework and process. As such, efforts will be made to incorporate marine protected areas (MPAs) into ICM program planning frameworks and implementation processes of local governments, using a range of tools and approaches in collaboration with partners identified in Table 10 (i.e., ACB; MSI; CTI; CI).

Table 13 illustrates the proposed priority pilot demonstration sites for this output.

⁵¹ www.cbd.int

Activities for Output 4.4

4.4.1. Assess the management and ecological networking effectiveness of the priority sites identified in Table 13 (as relevant) using agreed indicators from Output 4.2 (e.g., Management Effectiveness Tracking Tools (METT indicators); <http://www.thegef.org/gef/node/4465>).

4.4.2. Conduct baseline assessment and valuation studies on the ecosystems' products and services in selected sites in Table 13 using methodologies and indicators as agreed under Output 4.2, (e.g., 'healthy habitat' reporting system/SOC with stress reduction indicators, impact indicators, etc.).

4.4.3. Support risk/vulnerability assessments of the PAs/MPAs and MPA networks, including threats from conflicting uses and anthropogenic and natural hazards (e.g., oil spills, climate change).

4.4.4. Identify and prioritize issues, threats, priorities and goals of improvements in the management effectiveness of the PA/MPA and networks in Table 13, in collaboration with the concerned local governments, coastal communities and other stakeholders.

4.4.5. Based on identified priorities, goals, gaps and weaknesses, develop, adopt and initiate habitat protection, restoration and management plan for improvements in management effectiveness and ecological networking programs within the ICM programs of the local governments.

4.4.6. Launch MPA-focused pilot demonstration projects, including required training programs and communication plans designed to build awareness and facilitate local government, coastal community and stakeholders' awareness and ownership of the program, as well as development, testing/demonstration of innovative legal, economic and financial instruments for effective and sustainable management of MPAs (e.g., planning and zoning schemes, legal and economic instruments, eco-business opportunities, user fees/payment for ecosystem services, carbon credits, etc.).

4.4.7. Prepare an updated ecosystem health report card/SOC report after 3 years of operation, to evaluate the progress, achievements and shortcomings of the MPA-focused ICM pilot demonstration, with the objective of improving and adopting the implementation plan, and scaling up the scope of the plan to cover a greater proportion of MPAs/MPA networks within the jurisdiction of the local governments.

4.4.8. Prepare and disseminate case studies and technical reports on best practices and lessons learned.

Table 13. Proposed sites for activities to strengthen effectiveness of Marine Protected Areas (MPAs)

Country	Priority Site(s)	Replication Site(s)	Indicators*/Expected Project Outcome
Cambodia	Preah Sihanouk (including Koh Rong and Koh Rong Sanlem, Kampong Smach) (2 sites)	Preak Thnuot, Kampot, Koh Tunsay, Kep and Koh Kong	% increase in METT rating • 10% improvement over baseline surveys (Koh Rong and Koh Rong Sanlem)
China	Nanji, Zhejiang Province	Fangchenggang, Yangjaiang, Quanzhou, Zhanjiang, Xiamen and other sites	% increase in METT rating • 10% improvement over baseline survey (Nanji)
Indonesia	Nusa Penida, Buleleng and Karangasem, Bali		% increase in METT rating • 10% improvement over baseline surveys (Nusa Penida, Buleleng and Karangasem)
Philippines	Verde Island Passage Marine Corridor (VIPMC) Batangas Province (as part of VIPMC)		% increase in METT rating • 10% improvement over baseline surveys (VIPMC)
Thailand	Samui Archipelago (Pha Ngan Island, Tao Island group, Mukoangthong National Park)		% increase in METT rating • 10% improvement over baseline surveys (Pha Ngan Island, Tao Island group and Mukoangthong National Park)
Timor Leste	Atauro Island, Dili District, Batugade District		% increase in METT rating • 10% improvement over baseline surveys (Atauro Island, Dili District and Batugade District)
Vietnam	Cu Lao Cham Islands, Quang Nam Province	Nha Trang Bay MPA, Khanh Hoa Province	% increase in METT rating • 10% improvement over baseline survey (Cu Lao Cham Islands)

*Indicators based on PEMSEA's Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

Interim outputs under Outcome 4:

- 20% (45,000 km) of the region's coastline covered by ICM programs (geographical scaling up) (Table 11)
- 100% of the local governments implementing ICM programs (Table 11) complete SOC reports
- 25% of the local governments implementing ICM programs operationalize effective zoning schemes/MSPs, PA/MPA, EAFM and IRBCAM, and other relevant management tools and processes at identified sites in Tables 12-18, resulting in measurable improvements in the protection and management of ecosystem products and services, including:
 - a 1,000 ha increase in the areal extent of healthy, resilient coastal and marine habitats (i.e., coral reefs; mangroves, sea grass; sea weed) at identified conservation-focused ICM sites (functional scaling up) (Table 12)
 - a 10% improvement in the METT ratings of MPAs and locally managed marine areas (LMMAs) at identified conservation-focused ICM sites (Table 13)
- National CSR networks set up in 3 countries (Indonesia, Philippines, Thailand) partnering with national and local governments to scale up ICM programs (Table 11), and catalyzing investments from the public and private sectors in biodiversity conservation (Tables 12 and 13), sustainable fisheries and alternative livelihoods (Tables 14 and 15), water conservation and use management and pollution reduction (Table 16), and climate change adaptation/disaster risk reduction (Table 17).

OUTCOME 5: IMPROVED MANAGEMENT OF OVER EXPLOITED AND DEPLETED FISHERIES. LEADING TO RECOVERY

The background study prepared for the GEF stocktaking activity in 2010 noted that:

“Fisheries stand out as the issue not given adequate attention by GEF, in relation to its importance and in comparison to other transboundary concerns, such as pollution and habitat destruction and community modification. This issue is crucial in view of growing populations, and the need to secure food supply from the sea and to alleviate poverty. The Ecosystem Approach to Fisheries (EAF) management, incorporating the Integrated Coastal Management (ICM) management concept, could provide the necessary framework and process for addressing multisectoral conflicts in the coastal zone that contribute to the decline of fishery resources. Long-term investments for EAF are needed.”⁵²

It is important to note that the fisheries-related outputs and activities are relevant under IW-3 Outcome 2.3, namely, “Innovative solutions implemented for reduced pollution, rebuilding or protecting fish stocks with rights-based management, ICM, habitat (blue forest) restoration/conservation, and port management and produce measureable results.

⁵² Tengberg and Cabangan, *op.cit.* p. 3

The SDS-SEA identifies a series of actions which are aligned with targets identified in the Convention on Biological Diversity (CBD) Aichi Biodiversity (AB) Targets 7 and 11.

AB Target 7: by 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem approaches so that overfishing is avoided.

AB Target 11: By 2020 at least 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, as conserved through effectively and equitably managed, ecologically representative and well-connected ecosystems of protected areas and other effective area-based conservation measures, and integrated into wider landscapes and seascapes.

The main thrust of this outcome will be to support the convergence of existing national strategies and programs that focus on widespread degradation of coastal and marine habitats and the precarious loss of biodiversity, through ICM interventions in identified priority fisheries hotspots. Further, this will support the operationalization of National Biodiversity Strategies and Action Plans (NBSAPs) through ICM program development and implementation in priority marine corridors and fishing grounds, and provide the framework and process for aligning national and local priorities, programs and resources. Actions will be closely coordinated with those related to Output 2.4 (above), using a range of tools and approaches in collaboration with partners identified in Table 10 (i.e., CTI-CFF; CI; IUCN-ARO; MSI; WorldFish; CCRES; TEEB; EEPSEA), including the recently published Coral Triangle Regional Ecosystem Approach to Fisheries Management Guidelines⁵³.

Output 5.1 Innovative fisheries management schemes (i.e. ICM/EAFM) developed and implemented using ecosystem-based approach to reduce overexploitation in selected threatened fishing grounds

The focus of efforts towards this output will be to demonstrate the integration of ecosystem approach to fisheries management (EAFM) into ICM program planning frameworks and implementation processes of local governments. Table 14 identifies the priority sites proposed for this output.

Activities for Output 5.1

5.1.1. Conduct baseline studies, as required, to determine physical (e.g., area of fishing ground(s); area(s) of MPAs; number of fishers (municipal and commercial); biophysical (e.g., fish catch; fish stocks); economic (e.g., fish prices; cost of fishing); and social (fisher income; other sources of income; household income; etc.) conditions.

5.1.2. Develop/adapt/refine and implement “healthy fisheries” monitoring and SOC reporting systems/ at the ICM sites identified in Table 14, based on methodologies and indicators agreed to under Output 4.2, and specific to fisheries and “source to sink” dynamics.

⁵³ Pomeroy, R, R. Brainard, M. Moews, A. Heenan, J. Shackeroff, and N. Armada, Coral Triangle Regional Ecosystem Approach to Fisheries Management (EAFM) Guidelines. Publication. Honolulu, Hawaii: the USAID Coral Triangle Support Partnership, 2013. Print

5.1.3. Determine socioeconomic and ecological impacts of alternative management interventions (e.g., reduce fishing pressure; implement IUU regulations; closed fishing season) using available DSS models (e.g., FISH DA; TURF)

5.1.4. Support risk/vulnerability assessments on the coastal fisheries, habitat, aquaculture operations and fishing communities, including threats from anthropogenic and natural hazards (e.g., oil spills, climate change)

5.1.5. Develop, adopt and implement pilot demonstration projects on the integration of EAFM programs into the ICM frameworks and processes of local governments as listed in Table 14, including awareness building, training and education, targeting fishers and fishing communities and developing, testing and demonstrating innovative administrative, legal, economic and financial instruments for effective EAFM.

5.1.6. Prepare an updated healthy fisheries report card/SOC report after 3 years of operation to evaluate the progress, achievements and shortcomings of the EAFM-focused ICM pilot demonstration, with the objective of improving and adopting the EAFM plan, and scaling up the scope of the plan to cover a greater proportion of threatened fishing grounds within the jurisdiction of the local governments.

5.1.7. Convene national and regional technical workshops to review and assess ICM programs and disseminate knowledge on best practices through case studies, guidelines and SOC reporting.

Table 14. Proposed Sites for integrating ecosystem-based approach to fisheries (EAFM) with ICM

Country	Priority Site(s)	Replication s Site(s)	Indicators*/Expected Project Outcome
Cambodia	Koh Rong and Koh Rong Sanlem, Preah Sihanouk Province	Preak Thnuot, Kampot, Koh Tunsay, Kep and Koh Kong	Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in Koh Rong and Koh Rong Sanlem (340 km² sea area)
China	Meizhou Bay, Lianyungang City	Sharing of experience with Zhoushan fishing grounds	Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in Meizhou Bay (100 km² pilot sea area)
Indonesia	Tomini Bay	Gili Matra, West Nusa Tenggara Province Wakatobi Marine National Park, South Sulawesi	Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in Tomini Bay (595 km² pilot sea area)

Country	Priority Site(s)	Replication s Site(s)	Indicators*/Expected Project Outcome
Philippines	Macajalar Bay, Misamis Oriental		Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in 14 LGUs covering 470 km² in Mindanao Sea)
	Sarangani Bay Protected Seascape, Sarangani Province		Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in Sarangani Bay (215 km² pilot sea area)
Thailand	Pha Ngan Island		Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in Pha Ngan Island
Timor Leste	Liquica and Manatuto Districts		No baseline data Sustainable fisheries management plan developed, adopted and initiated in Liquica and Manatuto Districts
Vietnam	Nghe An and Khanh Hoa Provinces		Improved fisheries production (CPUE; size and composition of fish catch) <ul style="list-style-type: none"> 10% increase in the CPUE of important fish species in Nghe An and Khanh Hoa Provinces (15 km² sea area)

* Indicators based on PEMSEA's Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

Output 5.2 Reduced stress on coastal fisheries and household income improved with implementation of alternative/ supplemental livelihood policies, capacities and incentive programs in coastal communities

While there have been some labor productivity advances in many fisheries, at the “aggregate global level” the inability of resources to sustain these conditions, combined with open access conditions have prevented an increase in average labor productivity in the world's capture fisheries. Overall, productivity has diminished significantly due to a shrinking resource base and an increasing number of fishers. Concurrently, rapidly increasing demand for fish has accelerated the fishing effort, driven by globalization of markets. Benefits have been overshadowed by the continuous overexploitation due to poor fisheries governance and management.

Over the past few decades efforts in fisheries management have been integrated with other agendas — notably poverty alleviation, livelihoods development and climate change. Many development efforts have focussed on small scale fisheries in an effort to improve the socio-economic conditions of fishing communities in lower income areas. If fishers are “the poorest of the poor” then it suggests that they face additional constraints specific to the sector that make their living conditions and socioeconomic status worse than that of the other rural dwellers. Moreover, fishing communities might not be “economically” (in the income-poverty sense) worse off than other rural communities but it is conceivable that they suffer from higher vulnerability.

Experience suggests that for the large majority of households involved in fishing activities (full-time, temporary or occasional fishers) in the EAS region, fishing and related activities do not generate high economic returns but instead help them to sustain their livelihoods and “prevent them from falling deeper into deprivation”. Vulnerability, risk, resilience and sustainability are inherent elements of fisheries management for stakeholders. Fishing communities are particularly vulnerable to risks and hazards that are natural, technological, social, political and economic

According to the FAO, food security mechanisms, both direct and indirect, can have a multiplier effect on income and employment, and that fisheries and related activities such as processing and trade can help dependent households significantly. For the households with limited or no access to land or other factors of production (e.g., access to financial capital), small-scale fisheries, processing and trading are very important role in “supplementing alternative low per capita food production options and in providing one — or even the main — source of cash income”.⁵⁴

Healthier ecosystems and improved provisioning of marine ecosystem services lead to greater abundance of marine-based nutritional sources and income-generating activities. Over time, consistent and sustainable supply of fishery resources leads to greater food and livelihood security, a critical component of social resilience.

Efforts will demonstrate sustainable/alternative livelihoods for fishers and fishing communities, as appropriate, through diverse and innovative approaches, including cultural, conservation, trade and tourism, using a range of tools and approaches in collaboration with partners identified in Table 10 (i.e., RFLP; CCRES; CTI; FFI; WorldFish; SEAFDEC). Table 15 identifies priority sites where alternative/sustainable livelihood interventions will be demonstrated through a series of pilot projects.

Activities for Output 5.2

5.2.1. Conduct social assessment/social preparation activities in the identified priority sites in Table 15, identifying potential beneficiaries, particularly very poor fishers, women and indigenous peoples, including awareness building and training in business management, etc.

5.2.2. Conduct feasibility studies on livelihood development and implementation opportunities that support the establishment and development of financially sustainable and ecosystem-friendly livelihood activities (e.g., ecotourism, seaweed culture, sustainable aquaculture, etc.) in priority fisheries/biodiversity hotspots, as well as livelihood support mechanisms.

⁵⁴ Bene, Christopher. *Small Scale Fisheries: Assessing Their Contribution to Rural Livelihoods in Developing Countries*. FAO Fisheries Circular No 1008. Rome: 2006.

5.2.3. Assist organized community groups to identify, develop and pilot-test eco-business enterprises identified in feasibility studies, including training and extensions.

5.2.4. Link borrowers to existing micro financing schemes that can be tapped for identified income-generating projects.

5.2.5. Provide marketing assistance and linkages with suppliers and buyers, as required.

5.2.6. Evaluate the socio-economic and sustainability of the eco-business, to determine scaling-up and replication potential of the pilot demonstration projects within the priority sites, and among other fishers communities.

5.2.7. Prepare case studies and policy briefs for promotion to Local Chief Executives, national policymakers, donors and the corporate sector for scaling up and replication and mainstreaming into development plans.

Table 15. Proposed sites for promoting alternative/sustainable livelihoods

Country	Priority Site(s)	Replication Site(s)	Indicators*/Expected Project Outcome
Cambodia	Koh Rong and Koh Rong Sanlem, Preah Sihanouk	Koh Tunsay, Kep Province and Preak Thnuot, Kampot Province	Proportion of fisher households benefiting from sustainable/ alternative livelihoods in fishing communities <ul style="list-style-type: none"> At least 10% of fisher households in priority sites benefiting from sustainable alternative livelihood programs Increase in fisher households' incomes <ul style="list-style-type: none"> At least 25% increase in household income in fishers' households sustaining functional alternative livelihood programs
China	Lianyunng, Jiangsu Province	Zhoushan, Zhejiang Province	
Indonesia	Tangerang District, Jakarta Bay	Lampung Province Tomini Bay (Togean Islands in Central Sulawesi / Gorontalo)	
Lao PDR	Houay Xeset and Houay Tapeau, Saravanne Province; Houay Champi, Champasack Province; and Sedon River Outlet, Sekong Province (3 sites)		
Philippines	Macajalar Bay, Misamis Oriental; and Sarangani Bay, Sarangani		
Timor Leste	Liquica and Manatuto Districts		
Vietnam	Nghe An and Khanh Hoa Provinces		

* Indicators based on PEMSEA's Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

Interim outputs under Outcome 5:

- 2,000 km² of threatened fishing grounds covered by ICM/EAFM management plans (Table 14) with a measured increase in CPUE of 10% over baseline conditions for important fish species
- 10% of fisher households in identified coastal communities (Table 15) benefit from sustainable alternative livelihood programs
- 25% increase in household income in fishers' households benefiting from functional alternative livelihood programs (Table 15)

OUTCOME 6 REDUCED DISCHARGE OF POLLUTANTS FROM LAND-BASED ACTIVITIES AND IMPROVED WATER USE EFFICIENCY/CONSERVATION IN PRIORITY RIVER BASINS AND COASTAL AREAS

The SDS-SEA Implementation Plan calls for strategies and action programs for policies and programs on water resource development and management, addressing consumptive and non-consumptive water uses, pollution and waste management, climate change, food security, public health and the protection and conservation of natural resources. Actions should contribute directly to the relevant targets concerning access to safe drinking water and sanitation of the Millennium Development Goals, the Johannesburg Plan of Implementation and other international conventions and agreements dealing with land-based and sea-based sources of marine pollution. Moreover, actions should contribute to the priorities indicated in the Manila Declaration on Furthering the Implementation of the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities, as adopted by the Third Intergovernmental Review Meeting of the GPA in January 2012, namely: nutrient management, reduction in marine litter and wastewater management.

Corresponding actions will need to recognize the development and implementation of integrated river basin and coastal area management (IRBCAM) as an holistic approach to protecting and improving water quality in coastal areas, rivers and tributaries through: (a) conserving and managing water use efficiently and equitably; and (b) nutrient management, pollution reduction and waste management, with a view to ecosystem integrity, public health protection, and food security. A range of tools and approaches will be employed, in collaboration with partners identified in Table 10 (i.e., UNEP GPA; MERIT; MSI; KMI; FIO; TIO).

Output 6.1 Reductions of pollutants (e.g., N; P; BOD) measured in priority river basins and coastal areas

This proposed GEF project will demonstrate integrated river basin and coastal area management (IRBCAM) as a management tool for improving water use management efficiency and reducing pollution in river basins, and coastal areas and seas including Manila Bay, Jakarta Bay and Xiamen Bay. Proposed priority sites for Outputs 6.1 and 6.2 are illustrated in Table 16.

Activities for Output 6.1

6.1.1 Provide training and capacity building in modeling of pollutant loadings and ecosystems responses in priority river basins and coastal areas.

6.1.2 Prepare Total Allowable Pollutant Load assessments for each priority watershed/coastal area using available mass loading/water quality/ecosystem impact models/commercial software packages.

6.1.3 Conduct social, economic and ecological evaluations of watersheds and coastal areas, water users and water functions using methodologies and indicators agreed to under Output 4.2.

6.1.4 Assess alternative pollutant reduction good practices, approaches and technologies for priority pollutants in the watershed area, including socio-economic and financial implications, including the application of innovative technologies and practices under the GEF/WB Program on Scaling up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts.

6.1.5 Assist national and local governments in the priority areas to formulate, develop and initiate pollution reduction implementation plans and investments, in collaboration with stakeholders in the public and private sectors.

6.1.6 Establish/strengthen integrated water quality monitoring programs, and build capacity for respective agencies to develop/implement a system for water quality reporting and information sharing.

6.1.7 Conduct regional/national technical workshops to review, assess and disseminate IRBCAM progress, achievements and best practices.

Table 16. Proposed sites for IRBCAM/water use and conservation/pollution reduction and waste management

Country	Priority Site(s)	Replication Site(s)	Focus of intervention	Indicators*/Expected Project Outcome
Cambodia	Preah Sihanouk Khemrak Phumin, Koh Kong Province		Implementation of the Preah Sihanouk Coastal Strategy and Implementation Plan Water quality monitoring at selected beach areas; reduction and management of pollution (solid and liquid waste)	Reduction in raw sewage discharges to coastal waters <ul style="list-style-type: none"> • 250 households and 10 hotels/tourism facilities in Preah Sihanouk connected to individual or communal sewerage systems • 200 households in Khemrak Phumin connected to individual or communal sewerage systems • 50% reduction in annual BOD loading (20 MT) to coastal waters from identified households and hotels/tourism facilities
	Oukna-heng and Prey Nup, Preah Sihnaouk		Water use (rehabilitation of reservoir)	Increase in population with access to improved water supply <ul style="list-style-type: none"> • 400 households benefit from access to safe drinking water in Oukna-heng and Prey Nup
China	Jiulong River, Fujian Province	Jinjiang River	Implementation of the Jiulong River-Xiamen Bay Watershed Development Plan Legal framework for management of Jiulong River and Xiamen Bay; ICM/IWRM institutional arrangement	Reduction in nutrient loading to coastal waters <ul style="list-style-type: none"> • 20% reduction in annual nitrogen (2,000 MT) and phosphorus (350 MT) loadings (from domestic and agricultural sources/operations (in the Jiulong River watershed area (14,241 km²))
Indonesia	Jakarta Bay (Ciliwung River)	Pelabuhanratu Bay, Sukabumi Regency	Pollution reduction and management	Pollution reduction implementation and investment plan developed, adopted and initiated Reduction in organic loading to coastal waters <ul style="list-style-type: none"> • 20% reduction in annual

Country	Priority Site(s)	Replication Site(s)	Focus of intervention	Indicators*/Expected Project Outcome
				BOD (4,600 MT) loading from domestic wastewater sources in the Ciliwung River watershed (347 km ²)
	Bali		Water resource conservation and use management	<p>Water resource development and investment plan developed, adopted and initiated</p> <p>Increase in population with access to improved water supply</p> <ul style="list-style-type: none"> • 250 households and 5 hotels/tourism facilities benefit from access to adequate and safe drinking water in Bali • Groundwater extraction by 5 hotels/tourism facilities in Bali controlled at sustainable levels
Lao PDR	<p>Houay Xeset and Houay Tapeau, Saravanne Province</p> <p>Houay Champi, Champasack Province</p> <p>Sedon River Outlet, Sekong Province</p>		IRBCAM for 3 sub-basins focusing on water conservation and use management; water quality/quantity monitoring and reporting program	<p>River basin development and investment plans adopted and initiated in 3 sub-basins (2,628 km²)</p> <p>Increase in population with access to improved water supply</p> <ul style="list-style-type: none"> • 250 households in 3 sub-basin benefit from access to adequate and safe drinking water • Water quality and water quantity monitoring program implemented in 3 sub-basins
Philippines	Calumpang River, Batangas Province and Pampanga River		Pollution reduction and management	<p>Pollution reduction implementation and investment plan developed, adopted and initiated</p> <p>Reduction in organic and nutrient loadings to Calumpang River</p> <ul style="list-style-type: none"> • 20% reduction in BOD (12,800 MT) loading and 5% reduction in nutrient

Country	Priority Site(s)	Replication Site(s)	Focus of intervention	Indicators*/Expected Project Outcome
				(nitrogen (1,150 MT) and phosphorus (250 MT)) loadings with the implementation of good management practices (i.e., fertilizer application and management of livestock wastes) in the watershed (267 km ²)
		Abulug River, Kalinga Province	Water use/conservation	Water demand forecast and conservation management and investment plan developed, adopted and initiated in the watershed (3,372 km ²)
Thailand	Songkhla Lake	Bang Prakong River Basin	Implementation of the Songkhla Lake Development Plan	20% reduction in BOD (5,100 MT) loadings and 10% reduction in nitrogen (3,000 MT) and phosphorus (500 MT) loadings to Songkhla Lake
Vietnam	Huong River, Thua Thien Hue Province	Vu Gia-Thu Bon River, (shared by Danang and Quang Nam Provinces)	Pollution reduction and management	Pollution reduction implementation and investment plan developed and adopted for Huong River (watershed area: 2,830 km ²)

* Indicators based on PEMSEA's Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

Output 6.2 Innovative technologies and good practices in nutrient management and water use conservation demonstrated in priority coastal areas and river basins considering socio-economic and financial implications

Actions will focus on evaluating and promoting innovative technologies and practices for nutrient management and water use conservation. This will be associated with possible demonstrations under the GEF/WB Program on Scaling up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts, and other relevant programs in the region and elsewhere.

Activities for Output 6.2

6.2.1 Review case studies / good practice evaluations of brown investment projects conducted under the GEF/WB Program on Scaling up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts and assess applicability to SDS-SEA priority sites.

6.2.2 Support regional/national technical workshops to analyze water use/conservation and pollution reduction options in priority river basins and coastal areas with due consideration to socio-economic and financial implications.

6.2.3 Promote the adoption / internalization of innovative policies, technologies and practices into national and local government development and investment plans (linked to Output 2.3).

6.2.4 Facilitate the implementation of pollution reduction strategies and investment plans / replication of innovative policies and practices in partnership with selected national and local governments and investors as identified in Table 16.

6.2.5 Conduct regional / national technical workshops to review, assess and disseminate IRBCAM progress, achievements and good practices.

Interim outputs under Outcome 6:

- 30,000 km² of priority river basins/coastal areas covered by ICM/IWRM integrated management plans (Table 16), with measured reductions in pollutant loadings (10% for N (6,150 MT) and P (1,100 MT); 20% for BOD (22,500 MT)) using innovative technologies and good management practices consistent with socio-economic and financial implications
- 1,500 households in coastal and watershed areas in Cambodia and Lao PDR (Table 16) benefit from improved sanitation (i.e., elimination of raw sewage discharges; BOD reduction 20 MT/annum) and access to safe and reliable water supplies using improved technologies, operations and good management practices consistent with socio-economic and financial implications

OUTCOME 7 INCREASED PREPAREDNESS AND CAPABILITY OF COASTAL COMMUNITIES TO RESPOND TO NATURAL AND MANMADE HAZARDS

ICM scaling up actions relate to SDS-SEA strategies to address natural and anthropogenic hazards that threaten sustainable development of coastal and marine areas. Some of the hazards include sea level rise, earthquakes, excessive precipitation, droughts, storm surges, overloading of nutrients, oil and chemical spills, invasive alien species, etc. In addition it focuses on priorities identified in the Manila Declaration 2009, namely the scaling up and implementation of ICM for sustainable development and climate change adaptation.

Countries in the EAS region are signatories to the UN Framework Convention on Climate Change and have also adopted the Hyogo Framework of Action (HFA 2005-2015) with the objective of reducing disaster risk by 2015. Progress in implementing the HFA indicates that national efforts remain focussed on strengthening policy, legislation, institutional frameworks and capacities for disaster preparedness response, risk assessments and early warning. In contrast, more effort is needed in applying knowledge, education and innovative outreach programs to influence a culture of disaster resilience to address the underlying drivers that configure disaster risks.

The purpose of promoting the implementation of CCA/DRR strategies and plans at national and local levels through scaling up of ICM programs is to reduce vulnerability and increase resilience. Vulnerability and resilience may be physical, economic, social and ecological/environmental. Linking national and local CCA and DRR initiatives is especially critical in vulnerable coastal areas, including capacity building, financing and community awareness and mobilization.

Tools, methodologies and partnerships will be implemented with appropriate institutions and projects outlined in Table 10 (e.g., CTI-CFF; IPIECA, ADPC, KEI, OSRL, etc.), including the recent CTSP publication, entitled, “Incorporating Climate and Ocean Change into an Ecosystem Approach to Fisheries Management (EAFM) Plan”.⁵⁵

Output 7.1 Adaptive management measures implemented in ICM sites to reduce impacts of climate change, improve oil spill preparedness and strengthen maritime safety measures

Actions will seek to facilitate/accelerate implementation of climate change adaptation/disaster risk reduction programs at the local government level through pilot demonstration projects integrating natural and man-made hazards into ICM programs, including sea-based hazards in the Gulf of Thailand. Table 17 below provides a list of proposed priority sites for Outputs 7.1, and 7.2.

Activities for Output 7.1

7.1.1 Conduct studies on the socio-economic impact of specific natural and anthropogenic hazards, including climate change at the pilot demonstration projects.

7.1.2 Support studies/assessments of the effectiveness of emergency response, compensation and other factors related to community resiliency, including community awareness and linkages between local and national systems at the pilot demonstration sites.

7.1.3 Build capacity of local and national governments/agencies to prepare hazard/vulnerability maps, particularly to identify and evaluate vulnerable coastal and watershed areas, resources, habitats, coastal communities and sectors of coastal communities using the pilot sites as the learning areas.

7.1.4 Provide technical assistance to the three littoral countries in the Gulf of Thailand to publish and disseminate an Environmental Sensitivity Atlas for the Gulf of Thailand, and to prepare, adopt and implement a subregional oil spill contingency plan.

7.1.5 Facilitate the formulation and adoption of CCA/DRR action plans, integrated into the ICM programs, including adapting to, preparing for, and recovering from, natural and anthropogenic disasters at the pilot demonstration sites.

7.1.6 Support regional / national workshops on CCA/DRR best practices, lessons learned and investment strategies for national and local government officials.

⁵⁵ Heenan, A, R. Pomeroy, R. Brainard, A. Amri, P. Alino, N. Armada, J. Bell, W. Cheung, L. David, R. Guieb, J. Jompa, T. Leonardo, C. Logan, S. Mamauag, P. Munday, B. Parker, J. Shackeroff, and Z. Yazin. Incorporating climate change and ocean acidification into an ecosystem approach to fisheries management (EAFM) plan. Publication. Honolulu, Hawaii; The USAID Coral Triangle Support Partnership, 2013. Print

7.1.7 Based on the experience of the pilot demonstration sites, conduct regional and national workshops and seminars to:

- review, assess and disseminate progress, achievements and good practices;
- facilitate the development and adoption of climate smart policies and/or legislation;
- promote the development or improvement, installation and operationalization of early warning response systems and measures for natural (e.g., typhoons; flooding) and anthropogenic (e.g., HABs; oil spills) hazards; and
- promote investments in climate change adaptation measures, including soft and hard engineering improvements.

Table 17. Proposed sites for capacity and preparedness for natural and man-made hazards

Country	Priority site(s)	Replication site(s)	Indicators*/Expected Project Outcome
Cambodia	Ampeng Village and Angkoul Village, Angkoul Commune, Kep Province (one site)	Kampot Province Preah Sihanouk	Level of preparedness for hazards • DRRM plan, early warning system and capable institutional mechanism in place and functioning effectively Degree of vulnerability to hazards • 5% of households in highly vulnerable coastal areas relocated away from hazard zones • 100% of households in highly vulnerable coastal areas provided with evacuation routes and safe refuge locations
China	Dongying, Shandong	Sharing of knowledge with at least 5 other ICM sites	
Indonesia	Padang, West Sumatra	Cilacap Regency, Central Java Province (provincial capital) Aceh Jaya Regency, Aceh Special District Mataram, West Nusa Tenggara	
Philippines	Bulacan and Pampanga (Manila Bay area) Siargao	Aurora (model eco-town)	
Thailand	Chonburi Rayong and Songkhla Provinces		
Timor Leste	Liquica District		
Vietnam	Soc Trang and Kien Giang Provinces		
	Sihanoukville Autonomous Port, and Phnom Penh Port (Cambodia) Tanjung Priok Port (Jakarta, Indonesia) Ilo Ilo and Cagayan de Oro City Ports (Philippines)	Belawan Port in N. Sumatra General Santos City Port	PSHEMS in place and functional • 90% compliance with national regulations regarding pollutant discharges from port operations • 25% increase in “green

Country	Priority site(s)	Replication site(s)	Indicators*/Expected Project Outcome
	Bangkok Port and Laemchabang Port (Thailand) Dili Port (Timor-Leste) Danang and Haiphong Ports (Vietnam)		cover” within the port area • 50% reduction in accidental spills from ship and cargo handling operations within the port area
Sub-regional	Gulf of Thailand (Cambodia, Thailand and Vietnam)		Completion of ongoing sensitivity mapping involving Thailand, Vietnam and Cambodia; Preparation of sub-regional oil spill response strategy and guideline for oil spill dispersant application

* Indicators based on PEMSEA’s Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

Output 7.2 Port Safety Health and Environmental Management (PSHEM) Code adopted as an international standard for voluntary use in ports of participating countries

The PSHEM Code aims to serve as a standard for voluntary use by port authorities and those companies operating in the port, whose operations may have an effect on health and safety of people, the environment and port installations with a standard against which to measure the performance of its operations. The Code is also aimed at providing the port authorities and port operators with a systematic approach for implementing a Port Safety, Health and Environmental Management System (PSHEMS) in support to the implementation of the national government’s objectives and targets in support of the SDS-SEA.

Most of the countries in the region have established national development plans for the port sector aimed at fulfilling international standards (ISO) and international obligations and instruments (e.g., the Philippine Ports Authority is adhering to Executive Order 605 requiring government agencies’ certification to ISO; the Port Authority of Thailand required Bangkok Port to expand the coverage of the PSHEMS to cover all activities in the port). These countries are also signatories to the SDS-SEA and have established specific action programs that include the contribution of the port sector to the sustainable development of the coastal and marine environment. The PSHEM Code is significant to the national development plans of the countries in the region, as the Code enhances the capacity of the port sector to implement on the ground activities in the port to address the requirements of international standards and instruments.

The PSHEM Code and Recognition System will be of potential benefit to the countries of the region and to the port sector, specifically to the port authority and operators, as it can improve competitiveness/performance and the fulfilment of international requirements. These include:

- a. Economic benefits

- i. Improvement in the productivity of the port sector through improved safety, health and environmental performance, and
 - ii. Reduced accidents that can affect human lives, ships, port infrastructure, cargoes, the coastal environment and the community
- b. Technical benefits
 - i. Improvement in technical capacity of the port sector, national and regional trainers and training institution in the development and implementation of safety, health and environmental management system in the port
- c. Social and environmental benefits
 - i. Improvement in safety and environmental condition in communities surrounding the port area, and
 - ii. Contribution to the regional sustainable development strategy.

Work related to this output aims to set up and operationalize the PSHEM Code and Recognition System in participating countries, in collaboration with the ASEAN GIZ Sustainable Ports Project.

Activities for Output 7.2

7.2.1 Organize collaborative meetings and regional forum with potential partners to create awareness and understanding of benefits of the PSHEM Code.

7.2.2 Identify and enable training institutions and PSHEMS trainers to deliver programs for governments and responsible agencies.

7.2.3 Develop and implement training and PSHEM recognition programs in priority ports (refer to Table 17).

7.2.4 Prepare and disseminate case studies, support study tours, and create awareness in order to encourage governments/responsible agencies to scale up PSHEMS implementation.

Interim outputs under Outcome 7:

- CCA/DRRM plans, early warning systems and capable institutional mechanisms in place and functioning in coastal areas that are vulnerable to natural and/or manmade hazards (Table 17)
- 5% of households in highly vulnerable coastal areas relocated away from hazard zones
- 100% of households in highly vulnerable coastal areas provided with evacuation routes and safe refuge locations
- Gulf of Thailand Oil Spill Contingency Plan developed and adopted by 3 littoral countries (Cambodia, Thailand, Vietnam)
- 8 international ports with PSHEMS in place, achieving: 90% compliance with national regulations regarding pollutant discharges from port operations; 25% increase in “green cover” within the port area; 50% reduction in accidental spills from ship and cargo handling operations within the port area

OUTCOME 8: INNOVATIVE ECONOMIC AND INVESTMENT INSTRUMENTS GENERATE FUNDS TO REHABILITATE AND SUSTAIN COASTAL AND MARINE ECOSYSTEM SERVICES

Sustainable financing mechanisms are required to ensure adequate funding to develop and sustain commitments to SDS-SEA and ICM scaling up programs. The SDS-SEA has set a number of targets for sustainable financing that focus on:

- a. Adopting and implementing innovative national policies, programs and practices to establish a stable investment climate and encourage partnerships in sustaining coastal and marine ecosystem services
- b. Boosting capital flows into environmental investments from both the public and private sectors, and
- c. Strengthening the role of the business community/corporate sector in building a “blue economy” at the local, national and regional levels.

It is generally recognized that coastal and marine resources are making significant contributions to the economies of countries of the region. Yet, the value of social and economic benefits from coastal and marine ecosystem services to local and national economies is only beginning to be recognized, while the process of translating ecological value into practical terms for policymakers, local stakeholders and investors continues to be a challenge. This lack of explicit value has created a barrier to engaging policy makers in the drive for change, including the creation and implementation of policies that facilitate increases in investment by the public and private sectors.

Strengthening investments in the blue economy will involve:

- a. quantifying the value of ecosystem services and the potential for enhancing “blue” markets at the local level;
- b. converting the value of ecosystem services and their market potential into investment opportunities covering, for example, building community resilience to climate change;
- c. development of sustainable alternative livelihoods and start-up of new income generating opportunities, technologies and practices;
- d. scaling up public sector investments in ICM programs, with due recognition to the impacts and benefits derived from on-the-ground ICM application over the past 20 years among PEMSEA-participating countries, as well as appreciation of the potential benefits of converging sectoral initiatives and programs in priority coastal, marine and watershed areas (e.g., climate change adaptation; sustainable fisheries; biodiversity conservation; etc.) within the framework of national ICM programs;
- e. mainstreaming SDS-SEA objectives, targets and actions into national and subnational development and investment plans with a focus on development of an ocean-based “blue economy” (Output 2.3);

- f. implementing demonstration projects as examples of enterprises that can be undertaken at the local level to turning constraints to sustainable development into opportunities for innovation;
- g. packaging and promoting innovative policies, tools, technologies, practices and lessons learned from demonstration projects as well as from other relevant projects and initiatives; and
- h. forging partnerships arrangements, as appropriate, involving local, national and international stakeholders and investors for demonstration projects, as well as replicating and scaling up good practices.

Part of this will involve working in close collaboration with a number of regional and sub-regional initiatives, including: the GEF/World Bank Program on Scaling up Partnership Investments for Sustainable Development of Large Marine Ecosystems of East Asia and their Coasts; the GEF/UNDP Program on Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas through Intergovernmental Agreements and Catalyzed Investments; the YSLME SAP; the CTI Regional Plan of Action; and other investment projects in the region and globally.

The SDS-SEA also creates opportunities for innovative partnerships among national and local governments, regional and sub-regional organizations, UN agencies, donors, and domestic and foreign investors. Efforts are needed to facilitate collaborative planning and improved interaction among Country Partners, Non-Country Partners, government agencies, levels of government, and other regional organizations, programs and projects to reduce duplication, identify program gaps and mobilize the required resources and support for capacity development, knowledge management and undertaking concrete measures to achieve the priority targets of the countries and their partners. The project will also collaborate with selected partners (as identified in Table 10) to apply various tools and approaches (e.g., IUCN, SACCN, FFI, ACB, Xiamen University, EEPSEA).

Output 8.1 Innovative economic and investment mechanisms (e.g., revolving funds, PPP, PES, carbon credits) tested and applied to help participating countries' national and local governments sustain and scale up ICM programs

For Output 8.1, efforts will be undertaken to promote and demonstrate the application of public-private sector partnerships and other economic and investment instruments within the context of sustainable development and building and ocean-based blue economy at selected ICM sites (Table 18).

The GEF/UNDP Medium-Sized Project on the Development and Implementation of Public-Private Partnerships in Environmental Investments, completed in 2009, provided PEMSEA with a better understanding of the strengths and limitations of PPPs. The success stories in some sites showed the value of PPP as an alternative delivery mechanism for environmental investments. The PPP process also resulted in some significant developments in various countries. In Vietnam, an Environmental Protection Fund was established to include assistance to local governments in preparing PPP projects. In China, while direct linkage to PPP initiatives cannot be established, the setting up of the local bond market to help local governments raise funds on their own also signifies a good development.

Lessons learned from that GEF-supported initiative will form the basis for efforts under Output 8.1, including:

- A comprehensive approach is needed for packaging and promoting environmental financing and investment projects, including detailed technical evaluations of alternative sites, all possible technological options and desired project outcomes. A comprehensive and integrated study of site concerns or issues will not only provide better understanding of their needs, but also help to identify a more comprehensive set of solutions and package bankable projects. Potential private sector partners can build on these studies to offer innovative and integrated solutions (e.g., combining waste treatment and energy generation). The integrated approach also entails early involvement of the general public in the consultations, pre-feasibility studies and site selection. This approach will not only provide more options but will also be more cost and operation-efficient for both the local government and private sector.
- Credible and sustainable cost-recovery mechanisms are critical in getting investor confidence. Sources of revenue to cover capital expenditures and operating costs need to be carefully analyzed and assessed so as to avoid shortfalls in revenues and difficulties in attracting investors.
- National government agencies still have a big role in approving and supporting some local government projects, particularly environmental projects. National government agencies also continue to play significant roles in enforcing national environmental laws and standards, as well as in providing technical and financial support to local governments.
- Clearly defined institutional arrangements among local governments and national government agencies lower risks and transaction costs for private sector partners.
- Capacity building for local government officials and local stakeholders promote better understanding and appreciation of and commitment to the proposed environmental projects.
- Political leadership and political will have critical impacts on project development and implementation. Commitment or buy-in from local leaders is critical for the continuity of efforts.
- Environmental financing and investments can be facilitated through the implementation of ICM. The success of such economic and financing instruments rests ultimately on the commitment and support from the communities involved.
- Securing the commitment of local governments and communities to undertake environmental projects in partnership with the private sector through awareness-raising and capacity-building activities takes time and requires investment of substantial human and financial resources.

These lessons are integrated into the work scheduled for the proposed priority sites, where economic and investment mechanisms will be piloted, as identified in Table 18. Furthermore, the management of coastal “blue carbon” ecosystems, through conservation initiatives which avoid loss and degradation, restore and promote sustainable use, can serve as a “transformational tool”

in effective management of natural carbon (Table 12). There is today, sufficient scientific understanding of emissions from coastal ecosystems, and how carbon is sequestered, which will help to develop carbon management policies and related incentives, including financial incentives to support mitigation and adaptation through coastal “blue carbon” initiatives.

Activities for Output 8.1

8.1.1 Develop and disseminate case studies on best practices in sustainable financing and blue economy development from within the region and globally, with focus on a range of possible approaches and modalities, policies, institutional arrangements and operating mechanisms.

8.1.2 At the identified ICM sites (Table 18) and in collaboration with national and local governments and coastal communities, develop pilot demonstration projects aimed at testing ecosystem-based assessment tools and financing and investment mechanisms, covering: CSR/PPP; blue carbon financing; eco-enterprise/blue economy development; sustainable tourism; payment for ecosystem services; revolving funds; eco-villages/eco-city development) at pilot sites and document the experience. Pilot demonstration projects will be developed following a step-wise process, taking into consideration local conditions, namely:

Step 1: Identify priority concerns/issues of the ICM program requiring capital financing and investment

Step 2: Identify the financing and investment gaps and needs of the local government and community

Step 3: Assess the policy and institutional environment for ICM program development, implementation and sustainability

Step 4: Conduct IEC and stakeholder consultation activities at the local level

Step 5: Carry out assessments/pre-feasibility studies of the potential economic and investment instruments with local stakeholders

Step 6: Conduct demand and willingness-to-pay analysis

Step 7: Undertake local stakeholder consensus building

Step 8: Determine the cost-recovery mechanism(s), as may be relevant to the economic instrument or investment mechanism

Step 9: Prepare and package the economic instrument and/or investment opportunity briefs, addressed local, national and/or foreign sources of financing

Step 10: Identify prospective investors, financing institutions/mechanism and operating companies

Step 11: Negotiate the investment agreement among the partners and initiate the pilot project.

Step 12: Put in place a monitoring and evaluation system to monitor progress and assess the benefits, impacts and sustainability of the economic instruments and investment mechanisms to prospective investors/partners and local government and communities.

8.1.3 Provide training and capacity building for local governments regarding best practices in developing enabling governance frameworks for blue economy investments. In particular, this would include building of local and national capacity to undertake the scientific and technical analyses (data collection, mapping, stock assessments, reporting and accounting guidelines, methodologies, verification systems, etc.) for financing of coastal blue carbon management activities.

8.1.4 Support national and regional workshops/forums focused on blue economy to promote the replication and scaling up of best practices in economic and investment mechanisms to help participating countries' national and local governments sustain and scale up ICM programs.

Table 18. Proposed sites for demonstrating innovative economic and investment instruments

Country	Priority Site(s)	Replication Site(s)	Indicators*/Expected Project Outcome
Cambodia	Preah Sihanouk		Leverage CSR/PPP contributions to ICM implementation <ul style="list-style-type: none"> • 50% increase in CSR/PPP investments in ICM program in partnership with local government • revolving fund/socialized user fee system developed and operationalized with private sector and local governments for pollution reduction/waste management
China	Sanya, Hainan and Laoting, Hebei Juilong River/Xiamen Bay		Leverage CSR/PPP contributions to ICM implementation <ul style="list-style-type: none"> • 50% co-financing support for MPA management secured from tourism developers and tour operators in PPP agreement with local governments • PES tested, refined, adopted and implemented in Juilong River/Xiamen Bay watershed in support of pollution reduction investments
Indonesia	Tangerang in Jakarta Bay, Banten Province (as part of Rantai Emas Program of MOE)	Wakatobi, East Lombok and West Nusa Tenggara Jakarta Bay (related to Ciliwung River)	Carbon finance program related to mangrove forest rehabilitation <ul style="list-style-type: none"> • Carbon financing implementation and investment plan developed, adopted and initiated between local and national governments and private sector

Country	Priority Site(s)	Replication Site(s)	Indicators*/Expected Project Outcome
Philippines	Verde Island Passage Marine Corridor Batangas, Bulacan and Pampanga	Aurora Province	Develop eco-enterprises and leverage PPP/CSR contributions to ICM implementation <ul style="list-style-type: none"> • 3 local eco-enterprises developed, operationalized and sustained in VIP Marine Corridor • 50% increase in CSR/PPP investments in ICM programs in partnership with local governments in Batangas, Bulacan and Pampanga in support of biodiversity conservation and CCA/DRR
Thailand	Chonburi Province		Leverage CSR/PPP contributions to ICM implementation <ul style="list-style-type: none"> • 50% increase in CSR/PPP investments in ICM programs in partnership with local governments in Chonburi Province in support of CCA/DRR and pollution reduction
Timor Leste	Liquica District and/ or Manatuto District		Leverage CSR/PPP contributions to ICM implementation <ul style="list-style-type: none"> • CSR/PPP investments in ICM program to support alternative/sustainable livelihood development • 2 local eco-enterprises developed, operationalized and sustained in Liquica and Manatuto Districts
Vietnam	Danang		Local government investments in blue economy development <ul style="list-style-type: none"> • “Environmental City Initiative” investment plan implemented • 10% increase in local government investment in environmental infrastructure relevant to blue economy development

* Indicators based on PEMSEA’s Guidebook on the State of the Coasts Reporting for Local Governments implementing Integrated Coastal Management in the East Asian Seas Region, 2011

Output 8.2 Corporations and the business community engaged as partners of local governments in ICM programs and investments

The private sector has an important role in pursuing sustainable development through community involvement. Corporate-level CSR programs can contribute to the ICM projects of local communities through the *Framework for Sustainable Development of Marine & Coastal Areas through ICM (SD Framework)*. By applying this framework to CSR initiatives, the corporate sector has the opportunity to align their CSR programs with the goals and programs already being implemented by local governments. These kinds of partnership opportunities are good for local government as the support from the private sector may ensure the longevity and sustainability of their local programs.

In whatever place organizations find themselves, they will invariably have some effect on the environment, whether it is a waste issue, or water, or use of some other natural resources. The SD Framework provides an integrated approach in managing these issues, covering the triple bottom-line of financial, social, and environmental ‘returns’ for the organizations.

Using the SD Framework in CSR programs would foster coordination between the private sector and local government in a more structured manner wherein each company in coordination with local governments implementing ICM can develop CSR programs aligned with the Governance component or the Sustainable Development aspects indicated in the SD Framework. This also allows multiple companies to contribute to the development of one area. Joint cooperation among companies can also result to synergistic outcomes. This has already been in practice in PEMSEA’s ICM site of Bataan wherein the Bataan Coastal Care Foundation (BCCF), which is a network of corporations operating within the area, has helped the provincial government in the formulation of policies and plans and in the implementation of the Bataan ICM Project (BICMP).

With the structured approach of the SD framework and availability of programs in the local governments ICM, the CSR through ICM presents a strong business case, which involves:

- a. mitigating environmental impacts
- b. enhancing positive economic impacts
- c. building consensus between governments, private sector and civil society, and
- d. managing risks

Central to this work will be engage of the corporate sector and business community in building an ocean-based blue economy through ICM development and implementation programs.

Activities for Output 8.2

8.2.1 Explore investment/collaborative opportunities for the corporate sector/business community to partner with local governments implementing ICM, as identified in Table 18.

8.2.2 Develop and promote a CSR Roadmap among the corporate sector/ business community and facilitate PPPs, appropriate ‘blue carbon’ initiatives and other opportunities with local governments implementing ICM programs.

8.2.3 Organize and conduct a “Blue Economy” Business Forum, in collaboration with PNLG, to serve as a marketplace for blue economy projects and PPPs with local governments implementing ICM programs.

8.2.4 Develop and publish studies on good practices in CSR in the context of ICM implementation, emphasizing the “business case”

8.2.5 Develop and implement a recognition system for the corporate sector/ business community as an incentive mechanism to support ICM scaling up programs and blue economy development in partnership with local governments in the region.

Interim outputs under Outcome 8:

- 3 local governments implementing ICM programs adopt economic instruments and investment mechanisms (e.g., revolving funds, CSR, PPP, PES, carbon credits) (Table 18) and demonstrate increased investments in, and sustainability of, protection and rehabilitation of coastal and marine ecosystem services.
- PPPs established between corporate sector/business community and 3 local governments implementing ICM programs and investments (Table 18) in support of blue economy development and sustainable ecosystem services.

Component 3: Knowledge Platform for Building a Sustainable Ocean-Based Blue Economy

OUTCOME 9: REGIONAL KNOWLEDGE SHARING PLATFORM FOR ECOSYSTEM MANAGEMENT ESTABLISHED AND ENABLE DECISION MAKERS TO TRANSLATE POLICIES AND STRATEGIES INTO ACTIONS

To build knowledge management support for national SDS-SEA Implementation Plans, actions will focus on the collection, review, packaging and dissemination of lessons learned and best practices demonstrated among countries, across the region and globally, in coastal and ocean management and sustainable development. The knowledge management support system has two principal purposes, namely:

- to strengthen the use of available scientific information, technologies, processes and lessons learned in policy making and decision taking, and
- b. to increase political commitments and investments of national and local governments, the business community/corporate sector, donors, banks and investors for up scaling and replication of innovative technologies, tools, practices and procedures contributing to protecting and sustaining ecosystem services.

The specific aim will be to establish a regionally and country-owned knowledge platform that:

- a. facilitates the integration of investments in sustaining ecosystem services into national and regional economic and development policies, processes and plans

- b. strengthens linkages to the sustainable development agenda adopted by countries of the region; enhances capacities and services at the central and local government levels for developing and implementing investment projects, and
- c. engages domestic and foreign investors, donors and financial institutions in investment projects at the local, national and sub-regional/LME levels.

Output 9.1 National and sub-national environmental monitoring programs for ICM sites, coastal seas and priority watersheds provide scientific data and evidence-based data on the effectiveness and impacts of management interventions and commitments

Environmental monitoring is conducted to determine the status and trends in the condition of ecosystems, the consequences of management actions (and inaction), and the necessary policies and management interventions to address adverse changes and conditions. The current approach to environmental monitoring normally entails a number of different agencies and institutions conducting separate monitoring programs. This fragmented approach fails to provide the comprehensive environmental assessment that is necessary to formulate effective solutions. In some cases, duplication of effort also leads to inefficient use of resources.

Efforts will be aimed at mobilizing international, national and local support for integrated environmental monitoring with, as a minimum, basic capacities in marine water quality monitoring and reporting at the local government level. The project will also collaborate with selected partners (as identified in Table 10) to apply various tools and approaches (e.g., MERIT; MSI; KOEM).

Activities for Output 9.1

9.1.1 Engage national and local governments, corporate sector, universities and other stakeholders to establish/ strengthen marine water quality monitoring programs. Forge partnership agreements.

9.1.2 Develop and implement training and capacity development programs.

9.1.3 Establish/strengthen water quality monitoring laboratories at priority ICM sites, in partnership with local and national governments, local stakeholders, donors, and/or the business community.

9.1.4 Set up information/decision support mechanisms at local and national levels (e.g., IIMS), which are supported by fully operational integrated environmental monitoring programs.

Output 9.2 State of Coasts reports published and disseminated by all participating countries

The SDS-SEA Implementation Plan advocates an approach to communicating information on ICM programs. In particular, the intention is to inform senior policy makers at the national level and local chief executives at the sub national levels of the progress and impacts of SDS-SEA and ICM program implementation, with regard to sustainable development of coastal and marine areas and climate change adaptation. In a broader sense this management target is also about communicating with stakeholders in general, raising public awareness, strengthening multi-

sectoral participation and accessing scientific data and information for assessment and decision-making processes.

There are two aspects to this. The first involves the development of a scientifically sound monitoring program to measure conditions in the coastal and marine environment, as well as surrounding watershed or catchment areas, and to measure changes and trends as a consequence of ICM implementation. The second is the use of the State of the Coasts (SOC) Reporting System as an operational tool for local governments to consolidate information and to report on the impacts, benefits and trends, relative to specific indicators of local, national and international sustainable development targets.

As part of the national ICM scaling up programs, priority ICM sites will prepare a baseline SOC report, which is a participatory process involving multi-sectoral stakeholders, identifying current conditions in the area. As local governments progress through ICM cycles, SOC reports will be prepared regularly to identify changes in the baseline conditions as a consequence of ICM interventions, as well as define new and emerging issues that warrant attention. These reports are submitted to the local government for review and assessment of the ICM program, and for planning subsequent stages of the ICM program. As more and more ICM sites prepare their local SOC reports, consolidation of these outputs into a national SOC will provide policymakers at the central level with an on-the-ground assessment of the national ICM scaling up program and its success in operationalizing national policy and targets.

Actions will focus on facilitating data management, analysis, interpretation, management, reporting and applications (e.g., IIMS, SOC, risk / vulnerability assessment, etc.).

Activities for Output 9.2

9.2.1 Support national and regional training on IIMS and SOC reporting systems (cross reference with Output 1.4)

9.2.2 Facilitate preparation of SOC reports for purposes of planning, assessment and decision making at the local government level.

9.2.3 Disseminate SOC reports in a timely manner and through accessible portals, including the PEMSEA website.

9.2.4 Strengthen PEMSEA's website as a regional and global knowledge center for ICM program development and implementation by expanding the scope and coverage of methodologies, approaches, case studies, best practices and impacts and benefits, with up-to-date information and reports from the project and from other coastal and ocean management projects in the region and globally.

Output 9.3 Skills, knowledge and support services of national and sub-national governments enhanced through ICM Communities of Practice, including the PEMSEA Network for Local Governments (PNLG), Regional Task Force/National Task Force (RTF/NTF), etc.

Capacity development and knowledge management actions are designed to raise public awareness and competence, build and strengthen multi-sectoral participation in support of the sustainable development of the coastal and marine environment, and mobilize increased

investments in protecting and sustaining coastal and marine ecosystem services from the public and private sectors. Actions should provide an opportunity for the participation of Non-Country Partners, academia, international organizations, donors and the business community in SDS-SEA implementation programs at local, national and regional levels.

As human capital formation and growth in applying ICM concepts, tools and methods take place throughout the EAS region, it will be important to find ways to activate “ICM Communities of Practice” which will serve as a provider of information, sharing of experience and good practices and support for scaling up investments in coastal and ocean governance and blue economy development.

A “Community of Practice” can be defined “as a group of people who share a craft and/or a profession”. The group can develop through a natural evolution due to common interests in a particular domain or field, shared by practitioners. It can also be created through a series of logical steps with the ultimate goal of gaining, adopting or accelerating transmission of knowledge in that field. Through sharing information and experiences, practitioners are able to learn from each other and further develop/refine the application of their skills.⁵⁶ In the context of the SDS-SEA, the Community of Practice will consist of a number of different, yet associated mechanisms by which ICM practitioners and stakeholders alike, can share experience and good practices, and support scaling up investments in coastal and ocean governance and blue economy development.

Activities for Output 9.3

9.3.1 Identify, assess and build capacity of ICM Learning Centers (LCs) to be accredited by PEMSEA. Facilitate networking of LCs, and assist in delivery of training and support services to local governments and stakeholders at ICM sites.

9.3.2 Develop/refine ICM training modules to be compliant with standards for PEMSEA certification. Modules will include special skills training relevant for CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, economic valuation of ecosystem services, marine spatial planning/coastal use zoning, State of Coasts, IIMS, etc.).

9.3.3 Translate ICM training modules into local working languages as required, and disseminate to ICM Learning Centers.

9.3.4 Collaborate with national agencies, universities and certification institutions to develop/finalize and initiate ICM professional certification system.

9.3.5 Strengthen the operation of the PNLG as an advocacy network for ICM program development and implementation, and facilitate the implementation of the PNLG action plan for blue economy development through ICM.

9.3.6 Identify/assess and engage potential Regional Centers of Excellence to provide specialized scientific and technical advice for IEMP, SOC, risk/vulnerability assessments and management, among others.

⁵⁶ Lave, Jean; Wenger, Etienne (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press. ISBN 0-521-42374-0.

9.3.7 Update/build up national and regional task forces of professionals, experts and service providers which can be mobilized to deliver training and technical assistance services for PRF and/or ICM priority sites.

Output 9.4 Evidence-based sound policy on ICM, climate change adaptation and disaster risk reduction (DRR) in priority areas supported by research results on ecosystem modeling, including total allowable nutrient loading, economic valuation of ecosystem services, and macro-scale zoning of vulnerable coastal and watershed areas

It will be essential to develop and conduct targeted research in support of sound policymaking and best management practices for sustaining coastal and marine ecosystem services while building and ocean-based blue economy at local and national levels. This will be undertaken through a variety of mechanisms, including the ICM network of Learning Centers, Regional Centers of Excellence and twinning arrangements, among others.

Activities for Output 9.4

9.4.1 In collaboration with participating countries and partners (Table 10) develop and conduct targeted research projects to support the formulation, adoption and implementation of sound policies and decisions in ICM, CCA and DRR, including for example: risk assessment/vulnerability assessment; environmental monitoring and reporting; ecosystem health report cards; carrying capacity for nutrients; economic valuation of ecosystem services; zoning for climate change/sea level rise; etc., at relevant locations identified in Tables 12 to 17.

9.4.2 Set up and operationalize a regional level scientific and expert advisory group(s) to develop methodologies, identify indicators and guide the preparation of national and regional SOC reports.

Interim outputs under Outcome 9:

- Regional e-portal established, promoting and facilitating knowledge sharing among at least 3 regional programs implementing SAPs (e.g., PEMSEA: YSLME; WCPFC; others)
- 50% of local governments implementing ICM programs have established or accessed environmental monitoring programs and information management/decision support systems and prepare SOC reports
- National SOC reports prepared by 8 participating countries for the EAS Congress 2015 and made accessible
- Regional SOC report prepared and submitted to Ministerial Forum 2018 and made accessible
- 15 ICM Learning Centers accredited and operational, offering PEMSEA-certified ICM training courses/degree programs
- PNLG membership increases by 100% (2011 baseline)
- 2 new RCOEs accredited and operational
- 2 Triennial Ministerial Forums and EAS Congresses, and annual PNLG Forums and XWOW events organized and conducted to serve as key platforms for information sharing and exchange among key stakeholders
- 50 ICM professionals achieve PEMSEA certification
- Special skills training modules developed/adapted in the context of ICM programs and translated into local languages covering CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, economic valuation of ecosystem services, MSP/CUZ, SOC and IIMS
- Targeted research projects completed in support of improved planning and decision-making, covering risk assessment/vulnerability assessment; environmental monitoring and reporting; ecosystem health report cards; carrying capacity for nutrients; economic valuation of ecosystem services; and zoning for climate change/sea level rise

OUTCOME 10: PROGRAM CONTRIBUTED TO GLOBAL LEARNING ON SCALING UP OF INVESTMENTS IN SUSTAINABLE COASTAL AND OCEAN MANAGEMENT

Over ten years of GEF support within the International Water Focal Area has given rise to a number of documented experiences, innovations and lessons. The IW Learn was established in order to harness this knowledge capital and exchange experience. This has been recognized by GEF partners as a successful initiative. GEF 6 (the next phase of replenishment) will accelerate its knowledge management and learning efforts, work with UNECE and other partners, including

key NGOs active in international cooperation on freshwater and oceans. This will catalyze and strengthen exchange between scientists and practitioners within the GEF portfolio, as well as serve as a model for effective knowledge management for other GEF focal areas. Emphasis will remain on active learning across the portfolio and strengthen the impact of GEF funded interventions and South-South experience sharing.⁵⁷

Output 10.1 One percent of IW budget allocated to the regional knowledge platform to contribute to IWLearn activities, including IWLearn project websites, experience notes and IW Conferences

Primary actions will encourage the conduct of collaborative planning and implementation of KM projects with IWLearn, including participation in regional and global events.

Activities for Output 10.1

10.1.1 Organize and conduct international workshops/forums to facilitate cross-region interaction and experience in coastal and ocean management/IW trans-boundary priorities.

10.1.2 Support participation of PEMSEA in IW conferences/events, sharing good practices and case studies in SDS-SEA implementation.

Output 10.2 Knowledge and best practice in ICM facilitated by outreach to programs promoting sustainable coastal and ocean development in large marine ecosystems of South Asia, South Pacific, Latin America and Caribbean, etc.

Activities related to Output 10.2

10.2.1 Develop an outreach policy and protocol for a PEMSEA-facilitated outreach service to non-member countries/other regions seeking assistance to develop and implement national/regional sustainable development programs for coasts and oceans.

10.2.2 Organize and conduct exploratory missions/site visits to non-member countries/regions, in collaborative regional organizations and GEF Implementation Agencies, to scope out existing program needs and opportunities for PEMSEA outreach services.

10.2.3 Develop and initiate a PEMSEA outreach service designed to assist potential outreach partners with the planning, development, financing and implementation of SD programs for coasts and oceans.

⁵⁷ http://www.thegef.org/gef/replenishment_meetings/6.

Interim outputs under Outcome 10:

- PEMSEA and IW Learn collaborate in the design and development of a regional EAS KM platform, with linkages to the IW Learn global KM platform
- IWLearn and PEMSEA co-organize and conduct at least 2 regional workshops/seminars promoting and facilitating cross-region knowledge and experience-sharing in EAS region, Latin America, Caribbean, South Asia, etc.
- PEMSEA participates in 2 IW conferences/ events, sharing best practices and case studies in SDS-SEA implementation
- PEMSEA outreach services established with collaborative engagements in one other regional sea/LME outside of the EAS region

PROJECT INDICATORS

110. The project indicators contained in Section II/Part II (Strategic Results Framework) include only impact (or ‘objective’) indicators and outcome (or ‘performance’) indicators. They are all ‘SMART’⁵⁸. The project may however need to develop and/or refine a certain number of process-oriented indicators to support ongoing site-based M&E and SOC reporting processes.

111. In turn, the choice of indicators is based on two key criteria: (a) their pertinence to the above assumption; and (b) the feasibility of obtaining/producing and updating the data necessary to monitor and evaluate the project through those indicators. The following are the project’s key indicators:

Table 19. Elaboration on Project Indicators

Indicator	Explanatory Note
<i>At objective level</i>	
Number of participating countries and local governments that have mainstreamed SDS-SEA/ICM programs into their respective development and investment plans,	<ul style="list-style-type: none">• Six (6) participating national governments adopt a national coastal and ocean policy and develop and initiate national sectoral legislative agenda aligning sectoral issues and programs with the national policy, including CCA/DRR, fisheries, coastal development, maritime transport, etc.• At least 3 national governments and 8 local governments incorporate SDS-SEA/ICM, CCA/DRR, and SAP/NAP targets into their respective medium-term investment plans and initiate investment programs supporting longer-term management programs and capital investments
<i>At outcome level</i>	
1. Number of agreements signed and initiated with Country and Non-	<ul style="list-style-type: none">▪ Consultative processes, period assessments and collaborative reporting systems lead to signing of agreements with Partner Countries▪ Collaborative activities undertaken with YSLME/WCPFC

⁵⁸ Specific, Measurable, Achievable, Relevant and Time-bound.

Indicator	Explanatory Note
Country Partners and regional and international organizations, donors and corporate sector	<ul style="list-style-type: none"> Regional and national scientific, technical and other review processes lead to establishment of updated SDS-SEA
<p>2a. Number of countries adopting and initiating the implementation of national ocean policy, including supporting legislation and institutional arrangements</p> <p>2b. Number of countries mainstreaming national SDS-SEA/ICM programs into development and investment plans into their medium-term development and investment plans</p>	<ul style="list-style-type: none"> Country level consultations, collaborative workshops lead to establishment of institutional arrangements and coordinating mechanisms Workshops, forums, case studies and reviews lead to publication of national SOC reports Sector-based studies, workshops, reviews and policy advocacy feed into local/ national sector legislative agenda processes High level forums, study tours, PNLG workshops/training, case studies on ecosystems valuation feed into local/national processes on MTDPs and other investment planning Regional knowledge platform/e-portal established with linkages to interoperable data bases and other internet based portals Functional applications created to promote investment opportunities Regional/national technical workshops, policy forums, study tours, economic/ policy briefs conducted to inform decision-makers XWOW, Ministerial Forum and EAS Congress 2015 conducted
3. Percentage of PEMSEA's operational funding covered by sustainable financing mechanisms and partnership arrangements	<ul style="list-style-type: none"> PEMSEA Re-engineering and Financial Sustainability Plan and Roadmap implemented, continually assessed and improved/adapted to new opportunities, including the establishment of a PEMSEA Trust Fund
4. Increased proportion of healthy and resilient coastal/watershed habitats with effective and sustainable management systems in place	<ul style="list-style-type: none"> Needs assessment, capacity building, institutional and coordinating arrangements in place, and delineation of ICM programs undertaken at priority sites ICM programs leads to zoning, spatial plans, EAFM, MPAs and other governance mechanisms adopted and initiated at priority sites Ecosystems valuation studies, risk/vulnerability assessments, habitat restoration/ preservation actions and community-based monitoring programs undertaken/ initiated at priority sites MPA/MPA networking approaches integrated into ICM programs at priority sites towards achievement of Aichi Biodiversity targets, and 'healthy habitat' reporting system
5. Increased proportion of fishing grounds with reductions in overexploitation of fisheries and improved incomes for fishers' households	<ul style="list-style-type: none"> Depleted/threatened fishing grounds identified/validated Risk/vulnerability assessments conducted for priority sites EAFM approaches integrated into ICM programs at priority sites, including testing of innovative governance and economic tools for sustainable fisheries and aquaculture management "Healthy fisheries" reporting system developed using fisheries production and biophysical indicators Alternative/sustainable livelihood and enterprise development opportunities assessed, developed and implemented at priority sites
6. Increased proportion of priority river basins and coastal areas (i.e., pollution hotspots) with measurable reductions in pollutant discharges and	<ul style="list-style-type: none"> Capacity building and training on total allowable pollutant load modelling undertaken, and reports prepared for priority IRBCAM sites Ecosystems valuations studies, risk/vulnerability assessments conducted at priority IRBCAM sites Integrated water quality monitoring programs established/strengthened at priority IRBCAM sites

Indicator	Explanatory Note
improved water use efficiency/ conservation	<ul style="list-style-type: none"> Regional/national training conducted on water use/conservation and pollution reduction Investment strategies developed for priority IRBCAM sites, and integrated into policy processes through high level forums, advocacy and other multimedia approaches
<p>7a. Increased proportion of vulnerable coastal communities with effective preparedness, response and recovery systems to address natural and manmade hazards</p> <p>7b. Number of international ports in participating countries achieving/ expanding PSHEMS recognition</p>	<ul style="list-style-type: none"> Regional/national policy assessments, hazard and vulnerability mapping/ assessments, impact studies and gap analyses conducted to understand emergency response, compensation and other factors related to community resiliency, at priority sites CCA/DRR programs and action plans developed and implemented at priority sites Investment opportunities identified and advanced at roundtables and other forum PSHEMS trainers trained, and capacity building implemented at priority sites
8. Number of priority sites testing, adopting and implementing innovative economic and investment instruments within ICM frameworks and processes of local governments	<ul style="list-style-type: none"> Comparative review of economic and investment instruments conducted Selected instruments tested/piloted at priority sites, and developed into case studies Regional/national technical workshops on ‘blue economy’ conducted, using case studies and other related documentation on experience CSR recognition program implemented
<p>9a. Number of collaborative knowledge sharing initiatives among regional programs</p> <p>9b. Increased proportion of national and local governments implementing ICM programs with environmental monitoring programs and SOC reporting systems</p> <p>9c. Improved access to capacity development/ training and education opportunities and technical assistance for SDS-SEA/ICM implementation</p>	<ul style="list-style-type: none"> Training and capacity building conducted on integrated environmental monitoring with emphasis on water quality laboratories Regional/national training on IIMS/SOC reporting, leading to publication of 8 national reports Capacity building undertaken for ICM Learning Centers leading to accreditation and operationalization ICM training modules refined, translated and certified for universities delivering training PNLG enhances membership services and increases membership by 100% Regional Centers of Excellence assessed and accredited Scientific expert advisory groups created, and targeted research projects funded and conducted
<p>10a. Number of collaborative/ joint initiatives between IW Learn and PEMSEA</p> <p>10b. Number of assessment</p>	<ul style="list-style-type: none"> PEMSEA participation in international workshops/conference and cross regional participation to share good practices in GEF-IW portfolio PEMSEA outreach service established and assisting partners regional seas / LME program with ICM implementation

Indicator	Explanatory Note
reports on ICM program development from outreach and exploratory activities	

RISKS AND ASSUMPTIONS

112. The project strategy, described in detail within this project document, makes the following key assumptions in proposing the GEF intervention:

- Baseline conditions in the selected areas can be extrapolated with high confidence level to other regional seas and lessons learnt can be successfully disseminated;
- Increased awareness and capacity will lead to a change in behaviour with respect to addressing the threats to sustainable coastal and marine management; and
- Integrated Coastal Management/Integrated River Basin and Coastal Area Management will gradually become a national priority for stakeholders in the EAS region as knowledge and information is made available.

113. During the Project Document (ProDoc) preparation phase, projects risks were updated from what has been presented at the PIF stage. They were further elaborated and classified according to UNDP/GEF Risk Standard Categories⁵⁹, and assessed according to criteria of ‘impact’ and ‘likelihood’ (Box 1):

Table 20. Elaboration of Risks

Identified Risks	Category	Rating	Elaboration
Variance or inconsistencies in government support for scaling up implementation of the SDS-SEA	POLITICAL	LOW	Changes in policy and decision makers, or other events beyond the control of the project, lead to changes in support for the project objective of sustaining ocean and coastal ecosystem services through scaling up of partnerships, capacities and/or investments.
Resource use conflicts between participating countries	POLITICAL	LOW	Potential conflicts between participating countries could occur over the use and management of the shared resources of the EAS region.
Innovative financial mechanisms less than optimal	FINANCIAL	MEDIUM	Innovative financial mechanisms (e.g., special accounts, user fees, PES, PPP, CSR, etc.) fail to deliver additional resources to support sustainable coastal and marine management.
Variance in capacities to scale up implementation of the SDS-SEA	STRATEGIC	LOW	The SDS-SEA implementation is taking place in 8 countries at national and sub-national levels concurrently. Varying capacities, skills, knowledge, access to resources, information and technologies

⁵⁹ Includes the following eight categories: environmental; financial; operational; organizational; political; regulatory; strategic; and other.

Identified Risks	Category	Rating	Elaboration
			constrain scaling up of ICM.
Threat transfers and/or additional stresses created through ICM interventions	ENVIRONMENTAL	LOW	There may be circumstances where ICM governance frameworks implemented in one location, will drive those who engage in destructive activities to locations where regulations are not well developed or enforced (e.g., fisheries). There may also be circumstances where ICM interventions may inadvertently increase other stresses and threats on the environment.
Failure to mainstream ICM, CCA/DRR, NAPs/SAPs	ENVIRONMENTAL	LOW	Mainstreaming of ICM, CCA/DRR, and NAPs/SAPs targets into national and local level targets and investment plans constrain progress in scaling up.
Environmental variability and climate change	ENVIRONMENTAL	LOW	Variability in environmental patterns and climate change compromise project achievements in terms of sustaining ecosystem services

Box 1. Risk Assessment Guiding Matrix						
Likelihood	Impact					
		CRITICAL	HIGH	MEDIUM	LOW	NEGLIGIBLE
	CERTAIN/IMMINENT	Critical	Critical	High	Medium	Low
	VERY LIKELY	Critical	High	High	Medium	Low
	LIKELY	High	High	Medium	Low	Negligible
	MODERATELY LIKELY	Medium	Medium	Low	Low	Negligible
	UNLIKELY	Low	Low	Negligible	Negligible	Considered to pose no determinable risk

Table 21. Project Risks Assessment and Mitigation Measures

Identified Risks	Impact	Likelihood	Risk Assessment	Mitigation Measures
Variance or inconsistencies in government support for scaling up implementation of the SDS-SEA	LOW	LOW	The project is in line with agreed strategies, targets and implementation plans at regional, sub-regional, national and local levels, and is thus, strongly anchored in existing policies. Strong stakeholder participation in the project will further reinforce support from policy and decision makers at all levels	Engagement through regular policy dialogue, Ministerial Forums, EAS Congress, PNLG, demonstration of good practices and tangible benefits
Resource use conflicts between			With countries agreeing to cooperate in the	Participatory and transparent processes and transactions,

Identified Risks	Impact	Likelihood	Risk Assessment	Mitigation Measures
participating countries			implementation of the SDS-SEA, conflicts should be resolved through high level policy dialogue and regional cooperation	combined with promoting a better understanding of the benefits of well-maintained and shared ecosystem services will reduce/prevent any potential resource use conflicts. The project will also provide science-based evidence, timely information and a venue/platform for regional dialogue on perceived or real conflicts.
Innovative financial mechanisms less than optimal			The project will explore test and validate new and innovative financing options and provide guidance to project partners on sustainable financing for scaling up of ICM, IRBCAM, CCA/DRR and implementation of NAPs	Pilot testing of innovative financing instruments and sharing of knowledge on good practices will help countries understand the range of options available, and implement those instruments that are appropriate/customized for their social, political, economic and environmental context.
Variance in capacities to scale up implementation of the SDS-SEA			The project will have a strong focus on building capacity at the local, site level. Capacity needs assessments will be matched with required technical assistance, and to the extent possible combine use of local with external forms of support. Building of local capacity based on a regional knowledge management platform that has common sets of standards and approaches (e.g., ICM Code) will help address gaps.	A knowledge management strategy which features common principles of sharing, the establishment of communities of practice – networks of ICM Learning Centres focussed on local problems and local solutions, regional centres of excellence, network of local chief executives (i.e., PNLG), regional and national task forces, public advocacy and various other forms of outreach and communications will help address unevenness in capacity.
Threat transfers and/or additional stresses created through ICM interventions			The high level of stakeholder participation and consultative processes inherent in ICM ensure that sufficient cost benefits analysis will be undertaken prior to commitment any course of action.	The UNDP Environment and Social Screening Procedure (ESSP) will serve as one tool to address and mitigate these types of concerns. The ESSP has been shared with national counterparts, and through participatory project management processes make efforts to reduce/prevent unintended consequences of project interventions.
Failure to mainstream ICM, CCA/DRR, NAPs/SAPs			The scope of the project has been agreed by the national governments in their 5-year SDS-SEA implementation plans, and	The project strategy considers the importance of keeping investments in sustainable development of coastal and marine areas high on the political

Identified Risks	Impact	Likelihood	Risk Assessment	Mitigation Measures
			local governments participating in ICM activities. Existing co-financing commitments of the partners is proof of their willingness to mainstream program targets into their development and investment frameworks	agenda in all participating countries.
Environmental variability and climate change			The project has been designed to mitigate adverse climate change impacts at vulnerable sites and communities through the development of risk management plans, establishment of early warning systems, and implementation of a suite of climate change adaptation and disaster risk reduction measures on the ground	Addressing climate variability and change is an inherent element of the project. Building of capacity for hazard identification, climate change adaptation and disaster risk reduction management plans and actions will help coastal communities adjust to the potential impacts.

INCREMENTAL REASONING AND EXPECTED GLOBAL, NATIONAL AND LOCAL BENEFITS

114. Eleven governments and major regional and international stakeholders in EAS region are brought together by the PEMSEA regional coordinating mechanism to design, develop and implement actions which enable ocean governance and secure a blue economy through sustainable development of coastal and marine areas. By scaling up implementation of the SDS-SEA, these countries are removing barriers and reducing threats to common and interlinked resources that are brought about by growing population pressures, competition over limited resources and ineffective governance systems. At the same time, improved management, conservation and sustainable use of coastal and marine resources hold promise to alleviate problems related to poverty / inequality of income and opportunity in coastal communities, address trans-boundary issues, transfer knowledge, skills, experience, lessons and good practices developed and acquired through the program within the region, as well as other regions in the world that face similar challenges.

115. The GEF increment will be a consolidated and transformative set of actions which will serve as a model for other regions, national and sub-national governments at the global level. Sustainable development of coastal and marine areas will be undertaken through a regional coordinating mechanism that enables implementation of regional strategy which features commonly defined goals, objectives and targets. ICM serves as a management and governance framework within which well-coordinated, cohesive, scientifically credible, networked sets of actions and support systems hold potential to generate benefits and equitable access at multiple scales. There are over 60 LMEs and linked watersheds / catchment areas around the world which

would benefit from sharing of knowledge and exchange of ideas based on the PEMSEA experience. This will be facilitated through a series of knowledge management initiatives using existing, shared and innovative platforms and media. Importantly the GEF project strengthens the capacities of governments and stakeholders in coastal areas, to increase levels of compliance to international, national and local treaties, conventions, laws, policies, ordinances etc

116. The proposed GEF project will also serve as a model by which other regions can learn how to galvanize commitments to increase levels of investment in ocean and coastal development, using a regional strategy. What makes this important is that this level of cooperation can be achieved in a region where there is a marked social / cultural, political, economic and environmental heterogeneity across the countries.

COST-EFFECTIVENESS

117. PEMSEA has to date, demonstrated the importance of its role as an enabler and a catalyst, which leverages GEF resources to pave the way for much more in resource commitments from, and benefits to, a variety of partners and stakeholders in the region, including marginalized, resource-poor communities, whose livelihoods are dependent on the coasts and oceans. Given this continuing developmental 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, continued GEF support is essential in order to secure the partnerships and commitments that are necessary to sustain the effort over the long-term. The strategy of the Project is to build on the operational and core set of partnership arrangements, capacities and capabilities that have been established to date, at the regional, national and local levels. The project will facilitate the scaling up of SDS-SEA implementation to a wider number of local governments, expanding the areal extent of ICM coverage, and tackling key issues related to implementation of national policies and supporting legislation concerning sustainable development, habitat restoration, sustainable fisheries management, pollution reduction, etc. The scaling up process will feature higher levels of engagement with local governments in PEMSEA Partners Countries, and will also serve as a way to expand and refine the range of ICM tools, methods and instruments.

118. The prior GEF-supported project covered a five-year period, with the understanding that full project would be implemented over 10 years. The first 5 years have been a *transitional period*, in which countries, their partners and other stakeholders have developed, agreed upon, and initiated implementation of framework partnership programs. The focus of activities has been 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 testing 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.

119. The proposed GEF support would cover the *transformation period*, in which the developed regional paradigm has shifted to wider implementation, 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. The sustainable regional mechanism for the implementation of the SDS-SEA is now in place; the integration of ICM scaling up programs into the national economic development programs of the majority of

participating countries has taken hold; the 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 has gained traction; operationalizing an ICM Recognition/Certification system to measure progress and conformity with the ICM Code is moving forward; and incorporation of the State of Coasts reporting system into the majority of national reporting systems on marine and coastal resource management has been initiated.

120. It is important to note that the leverage factor for this project is 1:13, based on country and non-country level commitments for co-financing of about USD 145,750,000. In this connection, the PEMSEA Terminal Evaluation of the prior project has observed:

“.....through an examination of project investment to co-finance at each level of project implementation (international, national, provincial and local), the ratio of GEF funds to that of contributions from non-GEF sources demonstrates substantial efficiencies deriving from the GEF investment. Levels of country and other co-finance have substantially exceeded levels described in the Project Document. GEF finance to co-finance has often exceeded a ratio of 1:10. The result has been the leveraging of significant on-the-ground achievement of Outputs at relatively low GEF direct investment.”⁶⁰

PROJECT CONSISTENCY WITH NATIONAL PRIORITIES/PLANS:

121. The proposed project is consistent with the vision and objectives of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), which has been adopted by 14 East Asian countries. In particular, the project will facilitate the achievement of milestone targets identified in the regional SDS-SEA Implementation Plan (2012-2016), which was agreed to by the 4th Ministerial Forum of the EAS Congress 2012 (Changwon Declaration 2012).

122. The regional SDS-SEA Implementation Plan represents a consolidation of the 5-year national SDS-SEA Implementation Plans for Cambodia, China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam. The national Implementation Plans include objectives, targets and actions to address the respective countries' priorities regarding sustainable development of coastal and marine areas, including adaptation to climate change and building an ocean-based blue economy.

123. The regional SDS-SEA Implementation Plan is also aligned with the objectives and targets of various global instruments, including Agenda 21, WSSD/JPOI, MDG, GPA, the Aichi Biodiversity Targets, Hyogo Plan of Action, the environmental agendas of the Large Marine Ecosystems (LMEs) of the East Asia Seas (i.e., Yellow Sea; South China Sea; Coral Triangle) and, more recently, the RIO+20 Declaration. In particular, the Changwon Declaration, which represents the East Asian region's response to the RIO+20 declaration, commits countries to apply the SDS-SEA Implementation Plan to support the implementation of the RIO+20 targets, and other relevant international and regional commitments related to coasts and oceans.

124. The project is consistent with the findings of the GEF Stocktaking Meeting in October 2010 in Manila. The most important findings were: a) pollution reduction from land-based sources and unsustainable exploitation of marine resources (over-fishing) as the two most pressing issues in the region, followed by destruction of critical habitat (coral reefs, mangroves,

⁶⁰ p. 53

sea grass beds), b) climate change seen as cross cutting issue of extreme urgency which need to be addressed, and c) PEMSEA given its broad mandate is the strongest regional mechanism for coastal and marine management in the EAS.

125. The GEF Stocktaking Meeting further concluded that PEMSEA and the SDS-SEA, respectively, provide a regional governance mechanism and a framework for: a) integrated and collaborative planning; coordination, and monitoring and reporting of outputs and impacts of regional, sub regional and national projects for sustainable management of the seas of East Asia, and b) facilitation of knowledge management and transfer of associated good practices for sustainable management of the seas of East Asia. The project will strengthen a) knowledge sharing and capacities across the LMEs and sub-regional projects, b) action plans through collaborative and joint undertakings in capacity development, national and regional policymakers' workshops/forums, and c) services to local governments and other stakeholders in replicating/ scaling up good practices.

126. The Convention on Biodiversity (CBD) review and analysis of the Fourth National Country Reports is clear about implementation priorities that require more attention through "new commitments and funding". There are suggestions that the delivery of National Biodiversity Strategies and Action Plans (NBSAPs) and Programs of Work for Protected Areas (PoWPAs) has been "less than satisfactory", and in the area of MPAs in particular, "targets are not being met".

127. Early experiences in establishing MPAs within an ICM framework have been relatively successful. More specifically, there are a set of guiding principles and process development approaches for managing MPAs in an ICM context. Component 2 of the project will address shortcomings in the management effectiveness of MPAs, and establish ICM/MPA learning centers at selected sites in each country. The learning centers will serve as a training ground and working example for countries to replicate good practices in MPA network development and management.

128. The project is also consistent with the recommendations of the GEF Annual Impact Report 2012, and specifically its recommendations related to the South China Sea and Adjacent Areas. Major outcomes of this project are targeted at mainstreaming the SDS-SEA and ICM programs of countries into their respective medium-term development and investment plans, coordinating and collaborative planning and implementation arrangements among regional mechanisms, and functional monitoring and reporting systems within the capacities of, and benefits to local governments and their priorities.

COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVENNESS

129. 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. 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 advanced industrialized countries, middle income countries, and lesser developed countries of the region.

130. The proposed project is targeted at assisting countries to strengthen coordination, build capacity, and leverage investments to achieve their commitments under 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. Formulation and adoption of the Manila Declaration and the Changwon Declaration which took place during Ministerial Forums and EAS Congress 2009 and 2012 respectively, and charted/re-affirmed directions and courses of action;
- c. Formulation and adoption of the Agreement Recognizing the International Legal Personality of PEMSEA, signed by Ministers of 8 participating governments during the Ministerial Forum of the EAS Congress 2009;
- d. Financial commitments to the establishment and operation of the PRF Secretariat Services, including in particular, cash contributions by Timor Leste⁶¹, China, Japan and RO Korea, through Cost Sharing Agreements (CSA) with the UNDP; and
- e. National consultation meetings, workshops and forums undertaken from January 2010 to June 2013 in Cambodia, China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste and Vietnam, with a total of over 400 participants, including national and local government officials and representatives of research and education institutions, NGOs, corporate and private sector and communities. 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.

131. The project will also complement the activities of the countries, UNDP, UNEP, 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: the Yellow Sea LME Project; CTI Arafura and Timor Seas Ecosystem Action Programme (ATSEA) — under the Coral Triangle Initiative; CTI Coastal and Marine Resources Management in the Coral Triangle: Southeast Asia under Coral Triangle Initiative; CTI Sulu-Celebes Sea Sustainable Fisheries Management Project (SCS); Hai River Basin Marine Pollution Reduction (China); Coral Reef Rehabilitation and Management Project Phase II (COREMAP III) (Indonesia); Bay of Bengal LME Project (Indonesia); Integrated Coastal Resources Management Project (Philippines); Marine Electronic Highway Demonstration Project (Straits of Malacca); Fifth Operational Phase of GEF Small Grants Programme (Regional - GEF/UNDP).

132. The EAS Partnership Council, as well as the Triennial Ministerial Forums and EAS Congresses, will serve as vehicles for sharing of information and strengthening partnerships and collaborative arrangements among these related initiatives and SDS-SEA implementation.

⁶¹ The PEMSEA Terminal Evaluation notes that the commitment by Timor Leste, ranked at number 147 in the 2011 Human Poverty Index, of USD 100,000 to ensure participation in the SDS-SEA Project is a further and special example of country commitment.” (p. 56).

SUSTAINABILITY AND REPLICABILITY

Environmental sustainability

133. Environmental sustainability is inherent in application of the ICM framework and approach. As indicated, weak governance systems are among the root causes of the overexploitation and degradation of coastal and marine resources in the EAS region. By internalizing a system of governance processes and instruments, combined with various management, technical and diagnostic tools and approaches, the GEF project will help build capacity at local levels to address local environmental concerns. A key element of the project will be the establishment of ‘healthy habitat’ and ‘healthy fisheries’ community-based monitoring and reporting systems, which will enable coastal communities to track progress and strengthen the linkages between generating science-based evidence and policy and decision-making processes. More importantly, with the focus on “blue economy”, valuation of ecosystems services, higher levels of awareness and participation of the business/corporate sector, and providing opportunities for responsible investments, will increase the chances of an environmentally sustainable future for the economies of the EAS region.

Financial sustainability

134. Financial sustainability will be addressed at three levels. First one of the primary objectives of the project is to continue to leverage investments from national and local governments. The levels of financial commitment from these governments are an indication that public sector expenditures/investments in sustainable development of oceans and coasts are increasingly viewed as a priority. Continual emphasis on demonstrating the social, economic and environmental benefits of sustaining coastal and marine ecosystem services, will help keep up this momentum. An essential component of this will be to work closely with national and local departments of finance, budget and management, development planning, etc., to ensure a broader understanding of the rationale for increased public expenditures, but also to find ways to internalize these into national accounting systems.

135. Secondly, the GEF project will address financial sustainability through a series of measures designed to assist local and national governments to diversify sources of financing for sustainable development of coastal and marine resources, and reduce reliance on a) external financing assistance, and b) public sector investments. These will include, among others, exploring/leveraging private sector participation in various responsible infrastructure investment opportunities, experimenting with instruments that are based on ecosystems values (e.g., payments for ecosystems services, user fees), market-based instruments (e.g., standards, recognition and certification systems) and other innovative instruments, including blue carbon financing.

136. Third, PEMSEA will continue to use the regional PEMSEA Trust Fund, as a vehicle to manage financing arrangements for the regional implementing mechanism, to channel and ensure best use of voluntary contributions of resources from countries, international agencies, and donors. There are currently three facilities that form part of the Trust Fund; a) Regional Partnership Fund to support PRF Secretariat operations; b) SDS-SEA Development Fund, which receives general contributions and proceeds from events, etc.; and c) Special Trust Fund, which receives contributions earmarked for special purposes. The PEMSEA Financial Sustainability Plan and Road Map provides guidance on use of these funds, and direction with respect to achieving short and medium term financial/management objectives.

Social sustainability

137. The GEF project will take steps towards social sustainability through inclusive and participatory approaches for all project activities. Detailed profiles have been prepared for each priority ICM site, which includes a cursory review of socio-economic, demographic, biophysical information as well as identification of local and national stakeholders and their respective roles in the project. This will be further advanced during the inception phase, to include the conduct of screening assessments which will identify, validate and analyze the social issues and concerns pervasive in each site. Vulnerability assessments will also include an assessment of populations and social groups that are might be exposed to different forms of risk from natural and man-made disasters. This information will flow into consultative processes during the formulation of alternative/sustainable livelihood, CCA/DRR management and action plans which will give due considerations to social issues. Among the segments of the coastal populations where greater attention will be paid include, economically disadvantaged households (i.e., low income), women, children, the elderly, indigenous groups and those with disabilities.

Institutional sustainability

138. Institutional sustainability is facilitated through confirmation of the legal personality of the PRF, which will offer a permanent, regionally-owned coordinating mechanism for scaling up of the SDS-SEA and beyond. The PRF has finalized a Re-engineering Plan and a Sustainability Roadmap and Plan, which, through the course of this project, will help with this institutional transformation. The GEF project will assist the PRF in establishing, refining, testing and implementing a suite of technical and secretariat services, and providing various products and services to support local and national institutions implementing sustainable development programs and projects in coastal and marine areas.

Replication

139. The GEF project will support on-going replication of processes and good practices through a well-conceived knowledge management component. Knowledge management will be founded on a robust, user-friendly, interoperable integrated information management system (IIMS) and State of Coasts reporting system, which will be supported by environmental monitoring programs, and targeted scientific and technical research initiatives at each ICM site. This information will serve as the basis for establishment of community mobilization, public advocacy and awareness creation initiatives, as well as support for decision making by key policy makers, resource planners and financial managers at local and national levels. Geographic and functional ‘scaling up’ will be facilitated through:

- a. Expanding the PEMSEA Non-Country Partners to enable wider coverage of sectors, geographic areas and technical knowledge and expertise;
- b. Partnerships with ‘replication sites’, which in most cases are adjacent areas which experience similar threats and problems, or are sites supported by other donors and funding agencies;
- c. Cross visits with sites that showcase good practices, study tours, twinning arrangements, regionally-inclusive training workshops;
- d. Support from locally-based universities and scientific and technical institutions (i.e., ICM Learning Centers);

- e. Specialized inputs from Regional Centres of Excellence, regional and national task forces
- f. Training and knowledge sharing through the PNLG, XWOW, EAS Congress, exhibits
- g. A range of information-based platforms and applications called “communities of practice” as well as the IWLearn facility, and
- h. Communicating an understanding among the decision-making and political elite of the economic consequences of inaction, or passive approaches to ocean and coastal governance.

PART III: Management Arrangements

IMPLEMENTATION ARRANGEMENTS

140. The project will be implemented by UNDP with UNDP Philippines serving as the Principal Project Representative (PPR). PEMSEA Resource Facility (PRF) will serve as the Implementing Partner of the project in accordance to the agreement to be entered into by the two parties.

141. The PRF will be responsible for: a) project planning, coordination, management, monitoring and reporting in accordance with the terms and conditions spelled out in the Project Document; b) procurement of goods and services, including human resources to achieve the objectives, outputs and outcomes of the project, ensuring that all activities including procurement services are carried out in strict compliance with PEMSEA rules and procedures as recognized by UNDP Manila; c) financial management, including overseeing financial expenditures against project budgets, as indicated in the Project Document and approved by EAS Partnership Council serving as the Project Steering Committee; and d) external auditing of financial management of the project, including the appointment of independent financial auditors in collaboration with UNDP Manila.

142. The project will be executed by the PRF in collaboration with the PEMSEA National Focal Points in each Partner Country through annual work planning, reporting and operating modalities agreed to during the inception workshop of the project.

PROJECT MANAGEMENT

143. The project will be executed in accordance with the PEMSEA organization chart and Project Organigram presented in Section IV, Part II of the Project Document.

144. Management oversight and coordination of project implementation will be carried out by the PEMSEA Resource Facility (PRF), headed by Executive Director (ED), who is funded by PEMSEA Partners and is responsible to the EAS Partnership Council. The ED will be the primary responsible authority for the project including its effective management and delivery of the expected outputs and outcomes and accountable for financial management.

145. Reporting to the PEMSEA Executive Director, a full-time Project Manager will be recruited to manage the project on a day-to-day basis. The Project Manager will lead a project team, which will be part of the SDS-SEA Implementation Office of the PRF. The Project Manager will provide project level leadership to ensure that the GEF-UNDP project is delivered in accordance with outputs and outcomes identified the Strategic Results Framework in this Project Document. The more detailed terms of reference for the Project Manager are provided in the section below.

146. The Administration, Finance and Human Resources Office, Policy and Planning Office, Secretariat Coordinator, Executive Assistant are part of the core group of the PRF, funded by PEMSEA Partners, and reporting to the Executive Director. In addition to their regular responsibilities, part of their duties will be to provide support services to the GEF project as required. The Head of Administration, Finance and Human Resources will be responsible for

recruitment of project staff, procurement of goods and services and financial accounting of project funds. The Head of Policy and Planning Office of PRF will support the project through partnership building and strengthening, collaborative planning, policy development, communication and advocacy, and monitoring and evaluation of the implementation of the project. The Secretariat Coordinator will coordinate, plan and organize EC and EAS Partnership Council meetings and prepare proceedings.

147. Section IV, Part II, provides an organigram of the SDS-SEA Implementation Office, and the GEF/UNDP project level management mechanism. In addition to the Project Manager, the project office will consist of project team leaders in: capacity development/knowledge management; recognition and certification; and ICM specialists responsible for SDS-SEA project implementation in the 8 participating countries and sub regional sea areas/LMEs.

148. Partners and collaborating organizations, including PEMSEA's Regional and National Task Forces, ICM Learning Centers and Regional Centers of Excellence, will be mobilized to provide expert advice and technical assistance in the planning, development and implementation of the SDS-SEA program and projects at the regional, national and local levels, including management interventions targeting: coastal policy, legislation and institutional arrangements; water resource conservation, pollution reduction and waste management; climate change adaptation and disaster risk reduction; habitat and fisheries management; MPA/MPA networking; biodiversity conservation; alternative livelihood development and sustainability. Table 10 provides an initial list of partner and collaborating organizations for the project. MOAs will be established with each partner/collaborating organization, detailing the terms of the partnership, areas of collaboration, and roles and responsibilities. The implementation of specific activities under the respective MOAs will be detailed in subcontracts or similar agreements, signed between the PRF and the partner/collaborating organization and/or the RTF/NTF members. The list of partners/collaborating institutions and organizations (Table 10) and RTF/NTF members will be regularly updated and submitted to the PSC for review and approval.

149. Similarly, MOAs will be signed with national agencies and local governments for the implementation of SDS-SEA/ICM projects and activities within their jurisdiction and areas of competence. The MOAs will define the scope of the project, objectives, roles and responsibilities, targeted outputs and resource requirements, including GEF budget (in the form of a grant) and co-financing commitments from the respective national agency (ies) and local government(s), as well as other partners/collaborators involved in the project. The implementation of specific activities under the respective MOAs will be detailed in grant agreements or similar documents signed between the PRF and the national agency and local government unit.

150. Project level operations will be guided by the PRF Management and Operations Manual and its associated administrative, procurement and accounting policies and procedures.

Project Oversight

151. The Intergovernmental Session of the EAS Partnership Council (PC) will serve as the Project Steering Committee (PSC). Representation in the Intergovernmental Session includes representatives from the 11 Country Partners of PEMSEA, UNDP Manila and the UNDP/GEF Regional Technical Advisor. The PSC will provide advice, guidance and facilitation of scientific, technical, financial and administrative matters related to project implementation. Operational oversight will be ensured by UNDP, through the UNDP Manila, and strategic oversight by the UNDP/GEF Regional Technical Advisor (RTA) responsible for the project. This oversight will

ensure that the project practices' due diligence with regard to UNDP's Environmental and Social Screening Procedure.

PART IV: Monitoring and Evaluation Plan and Budget

MONITORING AND REPORTING

152. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from the UNDP/GEF Regional Coordination Unit in Thailand. The Strategic Results Framework provides performance and impact indicators for project implementation along with their corresponding means of verification. The M&E plan includes: inception report, project implementation reviews, quarterly and annual review reports, and a mid-term and final evaluation. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

Inception Phase

153. A Project Inception Workshop will be conducted with the full project team, participating countries representatives, co-financing partners, the UNDP Philippines and representation from the UNDP-GEF Regional Coordinating Unit, as well as UNDP-GEF (HQs) as appropriate. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goal and objective, as well as finalize preparation of the project's first annual work plan on the basis of the SRF matrix. This will include reviewing the SRF (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise, finalizing the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project. Additionally, the purpose and objective of the Inception Workshop (IW) will be to: (i) introduce project staff with the UNDP-GEF team which will support the project during its implementation, namely the UNDP Philippines and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP Philippines and RCU staff vis-à-vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs), GEF Tracking Tool and related documentation, the Annual Project Report (APR), as well as mid-term and final evaluations.

154. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phasing. The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

Monitoring responsibilities and events

155. A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for EAS Partnership Council Meetings and (ii) project related Monitoring

and Evaluation activities. Day-to-day monitoring of implementation progress will be the responsibility of the Project Manager based on the project's Annual Work Plan and its indicators. The Project Manager will inform the UNDP Philippines of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. The Project Manager will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP Philippines and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

156. Measurement of impact indicators will occur according to the schedules defined in the Inception Workshop, using State of Coasts reports and ecosystem health report cards. The measurement of these will be undertaken by project team of the participating countries and local governments. Periodic monitoring of implementation progress will be undertaken by the UNDP Philippines through quarterly meetings with the Implementing Partner, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

157. Annual monitoring will occur through the Intergovernmental Session of the EAS Partnership Council, which will serve as the Project Steering Committee (PSC). This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project report will be submitted to the Council in July each year.

158. The Project Manager will prepare a UNDP/GEF PIR/APR for review and approval by the PEMSEA Executive Director, UNDP Philippines and UNDP-GEF RCU, prior to submission to the PSC. The submission to the PSC should be at least two weeks prior to the annual meeting. The PIR/APR will be used as one of the primary resource document for discussion. The Project Manager will present the PIR/APR to the Council, highlighting policy issues and recommendations for the decision by the PSC. The Project Manager also informs the PSC of any agreement reached by stakeholders during the PIR/APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary. The PSC has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

159. The terminal report of the project will be submitted to the PSC in the last month of project operations. The Project Manager is responsible for preparing the Terminal Report and submitting it to the PRF Executive Director, UNDP Philippines and UNDP-GEF RCU for review and comment, prior to submission to the PSC. The terminal report shall be prepared in draft at least two months prior to the next PSC meeting in order to allow review, and will serve as the basis for discussions in the PSC. The PSC will consider the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

160. UNDP Philippines and UNDP-GEF RCU as appropriate, will conduct regular visits to project sites based on an agreed upon schedule to be detailed in the project's Inception Report/Annual Work Plan to assess first hand project progress. A Field Visit Report/BTOR will be prepared by the CO and UNDP-GEF RCU and circulated no less than one month after the visit to the project team, all Council members, and UNDP-GEF.

Project Reporting

161. The Project Manager will be responsible for the preparation and submission of the following reports that form part of the monitoring process to the PRF Executive Director, UNDP Philippines and UNDP-GEF extended team. The first six reports are mandatory and strictly related to monitoring, while the last two have a broader function and the frequency and nature is project specific to be defined throughout implementation.

162. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year/Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan will include the dates of specific field visits, support missions from the UNDP Philippines or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the Project Inception Report, the UNDP Philippines and UNDP-GEF's Regional Coordinating Unit will review the document.

163. An Annual Progress Report shall be prepared by the Project Manager for review and approval by the PRF Executive Director and shared with the UNDP Philippines, UNDP-GEF and the PSC. As a self-assessment by the project management, it does not require a cumbersome preparatory process. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the Annual Progress Report (APR) covering the whole year with updated information for each element of the APR as well as a summary of results achieved against pre-defined annual targets at the project level. As such, it can be readily used to spur dialogue with the PSC and partners. An APR will be prepared on an annual basis prior to the PSC meeting to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The APR should consist of the following sections: (i) project risks and issues; (ii) project progress against pre-defined indicators and targets and (iii) outcome performance.

164. The Project Implementation Review (PIR) is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from on-going projects. Once the project has been under implementation for a year, a PIR must be completed by the UNDP Philippines together with the project team. The PIR should be prepared in May and discussed with the UNDP

Philippines and the UNDP/GEF Regional Coordination Unit during June with the final submission to the UNDP/GEF Headquarters in the first week of July.

Quarterly progress reports: Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Philippines and the UNDP-GEF RCU by the project team. Progress made shall be monitored by the PPR in the UNDP Enhanced Results based Management Platform.

UNDP ATLAS Monitoring Reports: A Combined Delivery Report (CDR) summarizing all project expenditures, is mandatory and should be issued quarterly. The Project Director should send it to the PSC for review and the Implementing Partner should certify it. The following logs should be prepared: (i) The Issues Log is used to capture and track the status of all project issues throughout the implementation of the project. It will be the responsibility of the Project Manager to track, capture and assign issues, and to ensure that all project issues are appropriately addressed; (ii) the Risk Log is maintained throughout the project to capture potential risks to the project and associated measures to manage risks. It will be the responsibility of the Project Manager to maintain and update the Risk Log, using Atlas; and (iii) the Lessons Learned Log is maintained throughout the project to capture insights and lessons based on good and bad experiences and behaviours. It is the responsibility of the Project Manager to maintain and update the Lessons Learned Log.

Project Terminal Report: During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

Periodic Thematic Reports: As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

165. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

166. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

INDEPENDENT EVALUATIONS, AUDITS AND FINANCIAL REPORTING

167. The project will be subjected to two independent external evaluations as follows: An independent Mid-Term Evaluation will be undertaken at exactly the mid-point of the project lifetime. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP Philippines based on guidance from the UNDP-GEF Regional Coordinating Unit. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC). The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

168. An independent Final Evaluation will take place three months prior to the termination of the project, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to UNDP-GEF Project Information Management system (PIMS) and to the UNDP Evaluation Office Evaluation resource Center (ERC). The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF Regional Coordinating Unit. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

LEARNING AND KNOWLEDGE SHARING

169. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition, the project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF Regional Unit has established an electronic platform for sharing lessons between the project coordinators. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be

beneficial in the design and implementation of similar future projects. Identify and analyzing lessons learned is an on- going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned.

Communications and visibility requirements:

170. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at <http://intra.undp.org/coa/branding.shtml>, and specific guidelines on UNDP logo use can be accessed at: <http://intra.undp.org/branding/useOfLogo.html>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/GEF_logo. The UNDP logo can be accessed at <http://intra.undp.org/coa/branding.shtml>.

171. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

AUDIT CLAUSE

172. The Implementing Partner will provide UNDP Philippines with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of GEF funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted according to UNDP financial regulations, rules and audit policies by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Implementing Partner.

Table 22. M&E Activities, Responsibilities, Budget and Time Frame

Type of M&E activity	Responsible Parties	Budget USD <i>Excluding project team staff time</i>	Time frame
Inception Workshop	Project Coordinator UNDP PH UNDP GEF	30,000	Within first two months of project start up
Inception Report	Project Team UNDP PH	None	Immediately following IW
Measurement of Means of Verification for Project Purpose	Project Manager will oversee the hiring of specific studies and	To be finalized in Inception Phase and Workshop. Indicative	Start, mid and end of project

Type of M&E activity	Responsible Parties	Budget USD <i>Excluding project team staff time</i>	Time frame
Indicators	institutions, and delegate responsibilities to relevant team members	cost: 10,000.	
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	Oversight by Project Manager Project team	To be determined as part of the Annual Work Plan's preparation. Indicative cost: 80,000 (annually); total: 400,000	Annually prior to ARR/PIR and to the definition of annual work plans
ARR and PIR	Project Team UNDP PH UNDP-GEF	None	Annually
Quarterly progress reports	Project team	None	Quarterly
CDRs	Project Manager	None	Quarterly
Issues Log	Project Manager UNDP PH Programme Staff	None	Quarterly
Risks Log	Project Manager UNDP PH Programme Staff	None	Quarterly
Lessons Learned Log	Project Manager UNDP PH Programme Staff	None	Quarterly
Mid-term Evaluation	Project team UNDP PH UNDP-GEF Regional Coordinating Unit External Consultants (i.e., evaluation team)	42,000	At the mid-point of project implementation.
Final Evaluation	Project team, UNDP PH UNDP-GEF Regional Coordinating Unit External Consultants (i.e., evaluation team)	62,000	At the end of project implementation
Terminal Report	Project team UNDP PH local consultant	0	At least one month before the end of the project
Lessons learned	Project team UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc.)	15,000 (average 3,000 per year)	Yearly
Audit	UNDP PH Project team	37,500 (average 7,500 per year)	Yearly
TOTAL indicative COST <i>Excluding project team staff time and UNDP staff and travel expenses</i>		USD 596,500	

PART V: Legal Context

173. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Philippines and the United Nations Development Programme, signed by the parties on 21 July 1977. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

174. The Resident Representative of UNDP Philippines is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Regional Coordination Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a. Revision of, or addition to, any of the annexes to the Project Document
- b. Revisions which do not involve significant changes in the immediate 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 which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility, and
- d. Inclusion of additional annexes and attachments only as set out here in this Project Document.

SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF) AND GEF INCREMENT

PART I: Strategic Results Framework

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
Objective: To catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA).	<ul style="list-style-type: none"> Percentage of participating countries and local governments that have mainstreamed SDS-SEA/ICM programs into their respective development and investment plans, 	<ul style="list-style-type: none"> SDS-SEA regional strategy and 5-year Regional SDS-SEA Implementation Plan adopted by the EAS Partnership Council (2012) 5-year National SDS-SEA/ICM Implementation Plans developed in 7 countries (Cambodia, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste, Vietnam) and adopted and mainstreamed into the investment plans in one country (China) and two local governments (Chonburi, Thailand; Xiamen, China). 	<ul style="list-style-type: none"> Three (3) participating national governments (Indonesia, Philippines, Vietnam) and eight (8) local governments (Preah Sihanouk and Koh Kong, Cambodia; Dongying and Fangchenggang China; Sukabumi and Tomini Bay, Indonesia; Guimaras and Pampanga, Philippines; Soc Trang and Thua Thien Hue, Vietnam) have mainstreamed SDS-SEA/ICM programs into their respective development and investment plans to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean based blue economy 	SDS-SEA Implementation Review Tripartite and national progress reports EAS Partnership Council proceedings Mid-term and Final Project Evaluations PEMSEA Accomplishment Reports	<p><u>Risk:</u> Changes in policy and decision makers, or other events beyond the control of the project, lead to changes in support for the project objective of sustaining ocean and coastal ecosystem services through scaling up of partnerships, capacities and/or investments.</p> <p><u>Assumption:</u> The project is in line with agreed targets, strategies and implementation plans at regional, sub-regional and national levels, and is therefore firmly anchored in existing policies. Strong stakeholder participation in the project will further reinforce support from policy and decision makers at all levels.</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
Component 1: Partnerships in Ocean and Coastal Governance					
Outcome 1: A self-sustaining, country-owned, regional mechanism governing and managing LMEs and coastal waters, rebuilding and sustaining ecosystems services and reducing the impacts of climate change on coastal populations in the East Asian Seas region.	Outputs: <ul style="list-style-type: none"> • Host Country Agreement ratified and implemented with the Government of the Philippines • Formal agreements signed and implemented with PEMSEA Partner Countries, donors and corporate sector in support of a self-sustaining PEMSEA and SDS-SEA implementation • Formal agreements signed with YSLME Commission (to be constituted), WCPF Commission and other regional and sub-regional programmes, regarding collaborative planning, implementation and reporting across organizations, projects and programs under the UNDP GEF East Asian Seas Program • Formal agreement submitted to Ministers of National Focal Agencies of Partner Countries for the adoption of an updated SDS-SEA regional strategy • Updated 5-year SDS-SEA Implementation Plan adopted by the EAS Partnership Council • The impacts and benefits of management interventions of the UNDP GEF East Asian Seas Program, including SDS-SEA, YSLME and WPEA SAPs evaluated and packaged in a Regional State of Oceans and Coasts Report • Regional State of Oceans and Coasts Report submitted to the EAS Congress and Ministerial Forum for approval and dissemination to stakeholders 				
	<ul style="list-style-type: none"> • Number of agreements signed and initiated with Country and Non-Country Partners, and regional and international organizations , donors and corporate sector 	<ul style="list-style-type: none"> • Haikou Partnership Agreement signed in 2006 establishing PEMSEA as a regional partnership mechanism • Host Country Agreement signed between PEMSEA and the Government of the Philippines (July 2012) • Cost-Sharing Agreements have been signed and operationalized with 3 PEMSEA Partner Countries (China, Japan and RO Korea) in support of the PEMSEA Resource Facility Secretariat Services • The Government of the 	<ul style="list-style-type: none"> • Host Country Agreement ratified by the Government of the Philippines providing PEMSEA and its officers and staff with immunities and privileges that facilitate effective and efficient operation • Signed Agreements with Country and Non-Country Partners provide voluntary financing and in-kind commitments to sustain PEMSEA's core operations. 	Formal agreements / memoranda with Partners and regional organizations Regional State of Oceans and Coasts Report PEMSEA Accomplishment Reports Proceedings of EAS Partnership Council and Ministerial Forums	Risk: Potential conflicts could occur between countries over the use and management of shared resources of the EAS. <u>Assumption:</u> With the countries' agreeing to cooperate in the implementation of the SDS-SEA, any conflicts should be resolved at a high policy level through regional cooperation. Risk: Coordination between YSLME Commission, WCPF

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
		<p>Philippines has signed a 10-year agreement (2007-2017) providing office building and amenities for the PEMSEA Resource Facility operation.</p> <ul style="list-style-type: none"> • The Government of Timor Leste is providing in-cash support to the PEMSEA Resource Facility in order to conduct training and other capacity development activities in the country. • An MOU was signed between PEMSEA and the GEF/UNDP YSLME Project to facilitate cooperation across projects. 	<ul style="list-style-type: none"> • Signed Partnership Agreements between PEMSEA and YSLME Commission, WCPF Commission and other regional governance mechanisms result in collaborative planning, coordination and implementation among the respective SAPs, while addressing program sustainability and integration with broader regional cooperation frameworks. • Regional State of the Oceans and Coasts Report published and disseminated, providing governments and stakeholders with up-to-date information on changes, trends, impacts and benefits of SAP implementation in the EAS region. 		<p>Commission may not be timely</p> <p><u>Assumption:</u> YSLMEC and WCPFC are willing to develop and implement collaborative initiatives, as confirmed under the GEF/UNDP PFD</p>
Outcome 2: National and local	<u>Outputs:</u> <ul style="list-style-type: none"> • Six (6) participating countries adopted and initiated national coastal and ocean policy, as well as national SDS-SEA implementation plans, supporting legislation 				

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
governments; adopting and initiating ocean policy, legal instruments, institutional improvements and programs, and mainstreaming SDS-SEA targets into their medium-term development and investment plans	and institutional arrangements <ul style="list-style-type: none"> Six (6) participating countries develop and initiate a national legislative agenda addressing sectoral issues in support of the national ocean policy, including CCA/DRR, integrated land- and sea-use zoning/MSP, etc. Three (3) national governments and 8 local governments incorporate SDS-SEA/ICM, CCA/DRR, and SAP/NAP targets into their respective medium-term investment plans and initiate investments 100 % of participating countries complete and disseminate national SOC reports 				
	<ul style="list-style-type: none"> Number of countries adopting coastal and ocean policy, and implementing national SDS-SEA implementation plans, including supporting legislation and institutional arrangements Number of countries mainstreaming national SDS-SEA/ICM programs into development and investment plans 	<ul style="list-style-type: none"> Coastal and ocean policy and legal instruments in place in 2 Partner countries (Japan, RO Korea), and under development in 6 countries (Cambodia, China, Indonesia, Thailand, Timor Leste and Vietnam), 5-year national SDS-SEA/ICM Implementation Plans developed in 6 countries (Cambodia, Indonesia, Philippines, Thailand, Timor Leste, Vietnam), and adopted and mainstreamed into the investment plans in one country (China) and two local governments (Xiamen, China; Chonburi, Thailand) 	<ul style="list-style-type: none"> National coastal and ocean policies and institutional arrangements in place in 6 countries (Cambodia, China, Indonesia, Thailand, Timor Leste and Vietnam), providing the platform and management framework for national programs focused on integrated management of priority coastal and marine areas, surrounding watersheds and blue economy development. National sector legislative agenda and priorities developed in 6 countries (Cambodia, China, Indonesia, Lao PDR, Philippines and Vietnam) for the purpose of aligning 	Official government reports on policy proceedings (e.g. Congressional debates, Parliamentary proceedings, hearings etc) Tripartite and national reviews Proceedings of EAS Partnership Council Mid-term and Final Project Evaluations PEMSEA Accomplishment Reports National SOC reports Regional SOC report	<p>Risk: National governments may be reluctant or unable to develop national policy and/or align national legislation with ocean policy within the project timeframe</p> <p>Assumption: Eleven (11) PEMSEA Partner Countries signed the Haikou Partnership Agreement (2006) committing to a target of national coastal and ocean policy in 70% of the countries by 2015. Progress is being made toward this target.</p> <p>Risk: National and local governments may have other investment priorities and are unable to commit to investments in SDS-SEA/ICM implementation</p> <p>Assumptions: Ten (10) countries have indicated their resolve to</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
			<p>sector-based regulatory and economic instruments with national coastal and ocean policy, as well as ratifying international ocean-related conventions and agreements.</p> <ul style="list-style-type: none"> • SDS-SEA targets incorporated into national and local medium-term development and investment plans in at least 3 participating countries (Indonesia, Philippines, Vietnam) and 8 participating local governments (Preah Sihanouk and Koh Kong, Cambodia; Dongying and Fangchenggang China; Sukabumi and Tomini Bay, Indonesia; Guimaras and Pampanga, Philippines; Soc Trang and Thua Thien Hue, Vietnam), covering ICM programs encompassing CCA/DRR, biodiversity conservation and management, sustainable fisheries, water supply, conservation and use management, 		<p>mainstream SDS-SEA/ICM priorities into their medium-term development and investment plans (Changwon Declaration 2012). The project will help facilitate this process in participating countries</p> <p>The PEMSEA Network of Local Governments, which is composed of 30 sub-national governments implementing ICM programs, has committed to promoting and scaling up ICM programs across the region to overcome the challenges to sustainable development of coastal and marine resources.</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
			pollution reduction, etc., in priority coastal areas.		
Outcome 3: Innovative financing mechanisms in place for sustained operation of the country-owned, regional coordinating partnership mechanism	<u>Outputs:</u> <ul style="list-style-type: none"> 100 % of the PEMSEA's core operations (i.e., management, administration, planning, fundraising and secretariat services) sustained through a PEMSEA Trust Fund with voluntary commitments from Country and Non-Country Partners, donors and the private sector/business community and other interested parties 100% of PEMSEA's technical services sustained through the delivery of products and services to Partners, Sponsoring Organizations and collaborators (e.g., PSHEMS, ICM and CSR recognition systems) PEMSEA's outreach services operationalized to facilitate improved coastal and ocean governance in non-Partner countries in the EAS region and outside of the region and providing a source of revenue to the organization 				
	<ul style="list-style-type: none"> Percentage of PEMSEA's operational funding covered by sustainable financing mechanisms and partnership arrangements 	<ul style="list-style-type: none"> PEMSEA Sustainable Financing Plan and Road Map adopted and initiated PEMSEA's PSHEMS, ICM and CSR recognition systems under development / refinement Several project proposals conceptualized / drafted for funding agencies with national and local governments, Non-Country Partners Concept paper/guideline for PEMSEA outreach services prepared and submitted to EAS Partnership Council 	<ul style="list-style-type: none"> Suite of products, services, funding mechanisms (ICM and special skills training and technical assistance services; ICM, PSHEMS and CSR recognition system; PEMSEA Trust Fund) and partnership arrangements (MOA/MOU/CSA, PPP, CSR) adopted and implemented in collaboration with PEMSEA Partners, non-partner governments, Sponsoring Organizations, donors and private sector/business community, providing sustainable funding for 100% of PEMSEA's operation. PEMSEAs outreach 	Partnership Agreements Sustainable Financing Plan and Road Map EAS Partnership Council Proceedings Tripartite and national reviews PEMSEA Accomplishment Reports Mid-term and Final Project Evaluation Project feasibility studies, concepts and proposals	<u>Risk:</u> PEMSEA Partners, collaborators, non-member countries, international organizations and donors are unwilling to adopt financing mechanisms or apply the products and services of PEMSEA. <u>Assumption:</u> There is a common understanding developed across PEMSEA Partners, local governments, international organizations, donors and key stakeholders in coastal communities etc, of the long term and added value of the products and services offered by PEMSEA.

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
			services being provided to non-Partner countries covering capacity development and technical assistance in support of improved coastal and ocean governance and the development of national ICM programs.		
Component 2: Healthy and resilient marine and coastal ecosystems					
Outcome 4: Increased areal extent of healthy, resilient habitats (i.e., blue forests), including mangroves, coral reefs, sea grass and other coastal habitats/ areas	Outputs: <ul style="list-style-type: none"> 20% (45,000 km) of the region's coastline covered by ICM programs (geographical scaling up) (Table 11) 100% of the local governments implementing ICM programs (Table 11) complete SOC reports 25% of the local governments implementing ICM programs operationalize effective zoning schemes/MSPs, PA/MPA, EAFM and IRBCAM, and other relevant management tools and processes at identified sites in Tables 12-18, resulting in measurable improvements in the protection and management of ecosystem products and services including: <ul style="list-style-type: none"> 1,000 ha increase in the areal extent of healthy, resilient coastal and marine habitats (i.e., coral reefs; mangroves, sea grass; sea weed) at identified conservation-focused ICM sites (functional scaling up) (Table 12) 10% improvement in the METT ratings of MPAs and locally managed marine areas (LMMAs) over baseline conditions at identified conservation-focused ICM sites (Table 13) National CSR networks set up and operational in 3 countries (Indonesia, Philippines, Thailand) partnering with national and local governments to scale up ICM programs (Table 11), and catalyzing investments from the public and private sectors in biodiversity conservation (Tables 12 and 13), sustainable fisheries and alternative livelihoods (Tables 14 and 15), water conservation and use management and pollution reduction (Table 16), and climate change adaptation/disaster risk reduction (Table 17). 				
	<ul style="list-style-type: none"> Increased proportion of healthy and resilient coastal/watershed habitats with effective and sustainable management systems in place 	<ul style="list-style-type: none"> About 12% (27,245 km) of region's coastline covered by ICM programs Capacity needs assessment partially conducted in 2 countries (Lao PDR and Timor Leste) 	<ul style="list-style-type: none"> ICM program coverage extended to 20 percent (45,000 km) of the region's coastline, with: a) local government institutional arrangements and 	PEMSEA Accomplishment reports Baseline and end-of project SOC Reports Tripartite and national reviews EAS Partnership Council	Risk: Restored habitats fail to generate desired ecosystem services because of poor understanding by planners and decision makers of the restoration techniques or lack of

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
		<ul style="list-style-type: none"> • National program or plan of action covering coastal habitat restoration and management including biodiversity conservation in place in 6 countries (Indonesia, Lao PDR, Philippines, Thailand, Timor Leste, Vietnam) and partially in one (China) • Sub-national / local action plans or management programs support targets in habitat restoration and management partially in all 8 participating countries • Indicative baseline data for new ICM sites prepared, and will be validated / expanded during inception phase 	<p>coordinating mechanisms in place; b) coastal strategies/coastal strategy implementation plans adopted, legitimized and being implemented; c) SOC or related M&E systems established; d) local and/or national governments committing human and financial resources and related investments to implement the coastal strategies; and e) capacity building programs/training of ICM managers and practitioners developed and initiated</p> <ul style="list-style-type: none"> • 25% of local governments implementing ICM programs provide evidence of: a) improved management effectiveness, sustainability and 	<p>Meetings</p> <p>Technical reports and related publications</p> <p>Mid-term and Final Project Evaluations</p>	<p>feasibility assessment.</p> <p><u>Assumption:</u> The value of healthy and resilient ecosystem services is fully recognized by decision makers, who will encourage and support the conduct and integration of ecosystem valuation information.</p> <p><u>Risk:</u> The ICM Code may not be fully received by local governments and stakeholders due to insufficient understanding of the value, lack of incentives, or institutional constraints.</p> <p><u>Assumption:</u> The project will work closely with local certification bodies / authorities to increase the level of acceptance and some degree of internalization (or “buy-in”) with existing national and local programs. Moreover, concerted efforts will be made to help local governments understand the value of the system, using various networks (e.g., PNLG), supporting data and community</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
			<p>benefits from CUZ/MSP and other relevant management tools and processes, for healthy and resilient ecosystem products and services and addressing CCA and DRR; b) harmonize access to marine space by established economic sectors; c) assess costs and benefits in order to clearly understand socio-economic and ecological trade-offs; and d) extend governance principles to be more inclusive of weaker, disadvantaged sectors, addressing issues of tenure and user-based access rights.</p> <ul style="list-style-type: none"> • Conservation-focused ICM pilot demonstration projects result in measureable improvements in the areal extent, health and resiliency of habitats (e.g., 1,000 		<p>mobilization.</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
			<p>ha of blue forests in Table 12), and replication of good practices initiated in 10 other sites including mangroves, coral reefs, sea grass and other habitats, in coastal waters and watershed areas including biodiversity hotspots and areas-at-risk to climate change (Table 12).</p> <ul style="list-style-type: none"> • MPA-focused ICM pilot demonstration projects at priority sites (Table 13) result in measurable improvement (10%) in management and networking effectiveness using METT indicators, and replication of good practices initiated in 8 other locally managed marine areas/MPAs (Table 13). • CSR networks established and functioning as partners and catalyzers for ICM scaling up and environmental investments in 3 		

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
			countries (Indonesia, Philippines, Thailand).		
Outcome 5: Improved management of over exploited and depleted fisheries, leading to recovery	Outputs: <ul style="list-style-type: none"> 2,000 km² of threatened fishing grounds covered by ICM/EAFM management plans (Table 14) with a measured increase in CPUE of 10% over baseline conditions for important fish species 10% of fisher households in identified coastal communities (Table 15) benefit from sustainable alternative livelihood programs 25% increase in household income in fishers' households benefiting from functional alternative livelihood programs (Table 15) 				
	<ul style="list-style-type: none"> Increased proportion of fishing grounds with reductions in overexploitation of fisheries and improved incomes for fishers' households 	<ul style="list-style-type: none"> National programs or plans of action that cover food security and livelihood management including fisheries and aquaculture in place in 4 countries (Cambodia, Indonesia, Thailand, Vietnam), and partially in place in 4 others (China, Lao PDR, Philippines, Timor-Leste) Sub-national / local action plans / management programs on food security and livelihood management, including fisheries and aquaculture, partially in place in all 8 participating countries Some fisheries management activities ongoing, but fragmented and limited to small geographic areas Some livelihood development activities are ongoing, but fragmented and limited to small geographic areas Indicative baseline data for new 	<ul style="list-style-type: none"> Sustainable fisheries-focused ICM pilot demonstration projects, covering 2,000 km² of threatened fishing grounds (Table 14) providing evidence of improved fish catch (10% improvement in CPUE) using ecosystem-based approach to reduce overexploitation, with replication of good practices initiated in 4 other threatened fishing grounds (Table 14). Pilot projects on sustainable/alternative livelihoods for fishers and fishing communities result in 25% household income improvement in 10% of households generating income from non-fishing sources, with 	Management and action plans Technical reports and case studies Baseline and end-of-project SOC reports PEMSEA Accomplishment reports Tripartite reviews Mid-term and Final Project Evaluations Proceedings of EAS Partnership Council meetings Investment prospect	Risk: Initiatives to promote sustainable fisheries management in the region have met with mixed success, due to the systemic nature of the problems, and the fact that there is no simple solution. PEMSEA does not have fisheries as a core expertise in this field. Assumption: The use of EAFM approach has been widely accepted, and a logical fit within the ICM framework. Food security is a high priority for national and local governments in EAS, and therefore requires additional resources and efforts through engagement with strategic partners and collaborators.

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
		ICM sites prepared, and will be validated / expanded during inception phase	replication of supplemental livelihood policies, capacities and incentive programs initiated in 4 other fishing communities (Table 15).		
Outcome 6: Reduced discharge of pollutants from land-based activities and improved water use efficiency / conservation in priority river basins and coastal areas	<u>Outputs:</u> <ul style="list-style-type: none"> 30,000 km² of priority river basins/coastal areas covered by ICM/IWRM integrated management plans (Table 16), with measured reductions in pollutant loadings (10% for N (6,150 MT) and P (1,100 MT); 20% for BOD (22,500 MT)) using innovative technologies and good management practices consistent with socio-economic and financial implications 1,500 households in priority coastal and watershed areas in Cambodia and Lao PDR (Table 16) benefit from improved sanitation (i.e., elimination of raw sewage discharges; BOD reduction 20 MT/annum) and access to safe and reliable water supplies using improved technologies, operations and good management practices consistent with socio-economic and financial implications 				
	<ul style="list-style-type: none"> Increased proportion of priority river basins and coastal areas (i.e., pollution hotspots) with measurable reductions in pollutant discharges and improved water use efficiency/conservation 	<ul style="list-style-type: none"> IRBCAM developed/tested in Pasig River-Laguna Lake-Manila Bay, Jakarta Bay-Ciliwung River, Bohai Sea National program or action plan for water supply / use / river basin management partially in place in 3 countries (China, Philippines, Timor Leste) and fully in place in four (Indonesia, Lao PDR, Thailand, Vietnam) Local level action plans or management programs for water supply / use / river basin management partially in place in all 8 countries National program or plan of action that covers pollution reduction and waste 	<ul style="list-style-type: none"> Pilot integrated river basin and coastal area management demonstration projects completed in priority watershed/coastal areas (30,000 km² as identified in Table 16), providing evidence of reduced pollutant discharges (20% BOD; 10% nutrient) and water resource conservation and use management. Innovative technologies and good practices in nutrient management and water use conservation demonstrated in priority coastal areas 	Management and action plans TAPL and other technical reports and case studies Baseline and end-of-project SOC reports PEMSEA Accomplishment Reports Tripartite and national reviews Mid-term and Final Project Evaluations Proceedings of EAS Partnership Council meetings	<u>Risk:</u> Institutional barriers to successful implementation of IRBCAM in some sites / coastal areas will impede progress, particularly since water use and water supply issues tend to be politicized. <u>Assumption:</u> Countries support actions that will complement existing programs addressing pollution reduction and water use conservation, particularly when they are applied in high priority watersheds and coastal areas.

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
		management in place in place in 4 countries (Cambodia, China, Indonesia, Thailand) and partially in place in three (Philippines, Timor Leste, Vietnam) • Sub-national / local action plans or management programs support targets in pollution reduction and waste management partially in place in all 8 countries	and river basins, with replication of good practices initiated in 5 other priority river basin and coastal areas (Table 16).		
Outcome 7: Increased preparedness and capability of coastal communities to respond to natural and manmade hazards	Outputs: <ul style="list-style-type: none"> CCA/DRRM plans, early warning systems and institutional mechanisms in place and functioning in coastal areas that are highly vulnerable to natural and/or manmade hazards (Table 17) 5% of households in highly vulnerable coastal areas relocated away from hazard zones 100% of households in highly vulnerable coastal areas provided with evacuation routes and safe refuge locations Gulf of Thailand Oil Spill Contingency Plan developed and adopted by 3 littoral countries (Cambodia, Thailand, Vietnam) 8 international ports with PSHEMS in place, achieving: 90% compliance with national regulations regarding pollutant discharges from port operations; 25% increase in “green cover” within the port area; 50% reduction in accidental spills from ship and cargo handling operations within the port area 				
	<ul style="list-style-type: none"> Increased proportion of vulnerable coastal communities with effective preparedness, response and recovery systems to address natural and manmade hazards Number of international ports in participating countries achieving / expanding PSHEMS recognition 	<ul style="list-style-type: none"> National program or plan for CCA in place in 8 countries National program or plan for DRRM in place in all countries except Cambodia Local level programs or plans of action for CCA partially in place in 7 countries, completely in one (Vietnam) Local level programs or plans of action for DRRM partially in 	<ul style="list-style-type: none"> CCA/DRRM-focused ICM pilot demonstration projects, covering 12 highly vulnerable coastal communities (Table 17) provide evidence of improved awareness, preparedness and resiliency to the impacts of climate change, oil spills and other natural and 	National and local policy announcements and legal ordinances Technical reports and case studies Hazard and vulnerability maps Media reports Baseline and end-of-project SOC reports	<u>Risk:</u> A sectoral focus on climate change adaptation and disaster risk reduction may impede the advancement and scaling up of an integrated approach (ICM) in some countries <u>Assumption:</u> National and local governments have been applying the ICM framework and process to address cross-

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
		<p>place in 7 countries, completely in one (Vietnam)</p> <ul style="list-style-type: none"> • One VA conducted (Cambodia) • PSHEMS recognition achieved in 3 international ports (Bangkok, Laemchabang, Tangjong Pelepas) 	<p>manmade hazards.</p> <ul style="list-style-type: none"> • Three littoral countries of the Gulf of Thailand (Cambodia, Thailand, Vietnam) publish and disseminate Sensitivity Maps for the Gulf and adopt a subregional oil spill contingency plan. • Port safety, health and environmental management (PSHEM) code adopted as an international standard for voluntary use in ports of 3 participating countries (Cambodia; Philippines; Thailand). 	<p>Accomplishment Reports</p> <p>Mid-term and Final Evaluations</p> <p>Proceedings of EAS Partnership Council Meetings</p>	<p>sectoral issues in the region for the past 20 years. CCA/DRR are cross-sectoral challenges to sustainable development and therefore governments acknowledge the need to strengthen and accelerate the implementation of ICM for sustainable development and climate change adaptation.</p> <p><u>Risk:</u> Benefits of PSHEMS may not be fully appreciated by key stakeholders, and therefore progress will be limited.</p> <p><u>Assumption:</u> National governments and concerned international agencies and associations recognize the need for building capacity to comply with international standards for integrated port management, particularly in an increasingly competitive industry.</p>
<p>Outcome 8:</p> <p>Innovative economic and investment instruments generate funds to rehabilitate and sustain coastal and marine ecosystem services</p>	<p><u>Outputs:</u></p> <ul style="list-style-type: none"> • 3 local governments implementing ICM programs adopt economic instruments and investment mechanisms (e.g., revolving funds, CSR, PPP, PES, carbon credits) (Table 18) and demonstrate increased investments in, and sustainability of, protection and rehabilitation of coastal and marine ecosystem services. • PPPs established between corporate sector/business community in 3 local governments implementing ICM programs and investments (Table 18) in support of blue economy development and sustainable ecosystem services. 				

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
	<ul style="list-style-type: none"> Number of priority sites testing, adopting and implementing innovative economic and investment mechanisms within ICM frameworks and processes of local governments 	<ul style="list-style-type: none"> Government policies / regulations facilitate investment by the business sector in sustainable development of the coastal and marine economy partially in 3 countries (China, Timor Leste, Vietnam) and fully in 3 countries (Indonesia, Philippines, Thailand) CSR Road Map drafted with focus on Philippines Evaluation of PPP experience undertaken with recommendations provided Case study on Bataan Coastal Care Foundation 	<ul style="list-style-type: none"> Innovative economic and investment mechanisms (e.g., revolving funds, PPP, PES, carbon credits) tested and applied to help participating countries' national and local governments sustain and scale up ICM programs and investments (Table 18). Corporations and the business community engaged as partners of 3 local governments in ICM programs and investments in blue economy (Table 18). 	<p>PEMSEA Accomplishment Reports</p> <p>Case studies and technical reports</p> <p>Literature and reports of industry / business support organizations</p> <p>Tripartite and other reviews</p> <p>Mid-term and Final evaluations</p> <p>Baseline and end-of-project SOC reports</p> <p>Proceedings of EAS Partnerships Council Meetings</p> <p>Proceedings of national/regional workshops</p>	<p><u>Risk:</u> Innovative financial mechanisms (e.g. special accounts, user fees, PES, PPP, CSR etc) fail to deliver additional resources to support sustainable coastal and marine management.</p> <p><u>Assumption:</u> The project will test and validate new and innovative financing options, and provide guidance to project partners on sustainable financing for scaling up ICM, CCA-DRR, and implementation of SAPs/NAPs.</p> <p><u>Risk:</u> There are limited opportunities identified for CSR. Moreover, local and national governments have not provided an enabling framework which would encourage and cultivate CSR initiatives. One of the primary challenges will be to make the “business case” for CSR, to ensure that socially responsible practices are internalized into existing business models.</p> <p><u>Assumption:</u> The corporate sector (public and private) is increasingly aware of the need to promote socially</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
					responsible investments and business practices, as way of enhancing the value of their assets.
Component 3: Knowledge platform for building a sustainable ocean-based blue economy					
Outcome 9: Regional knowledge sharing platform for ecosystem management established and enabling decision makers to translate policies and strategies into actions	<u>Outputs:</u> <ul style="list-style-type: none"> Regional e-portal established, promoting and facilitating knowledge sharing among at least 3 regional programs implementing SAPs (e.g., PEMSEA: YSLME; WCPFC; others) 50% of local governments implementing ICM programs have established or accessed environmental monitoring programs and information management/decision support systems and prepare SOC reports National SOC reports prepared by 8 participating countries for the EAS Congress 2015 and made accessible Regional SOC report prepared and submitted to Ministerial Forum 2018 for approval and made accessible 15 ICM Learning Centers accredited and operational, offering PEMSEA-certified ICM training courses/degree programs PNLG membership increased by 100% (2011 baseline) 2 new RCOEs accredited and operational 2 Triennial Ministerial Forums and EAS Congresses, and annual PNLG Forums and XWOW events organized and conducted to serve as key platforms for information sharing and exchange among key stakeholders 50 ICM professionals achieved PEMSEA certification Special skills training modules developed/adapted in the context of ICM programs and translated into local languages covering CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, economic valuation of ecosystem services, MSP/CUZ, SOC and IIMS Targeted research projects completed in support of improved planning and decision-making, covering risk assessment/vulnerability assessment; environmental 				

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
	monitoring and reporting; ecosystem health report cards; carrying capacity for nutrients; economic valuation of ecosystem services; and zoning for climate change/sea level rise				
	<ul style="list-style-type: none"> • Number of collaborative knowledge sharing initiatives among regional programs • Increased proportion of national and local governments implementing ICM programs with environmental monitoring programs and SOC reporting systems • Improved access to capacity development/training and education opportunities and technical assistance for SDS-SEA/ICM implementation 	<ul style="list-style-type: none"> • National communications program for knowledge sharing in place in 3 countries (Philippines, Thailand, Vietnam) and partially in place in 3 others (China, Indonesia, Lao PDR) • > 600 individuals trained up to 2012 • National level ICM training programs partially in place in 7 countries (Cambodia, China, Indonesia, Philippines, Thailand, Timor Leste, Vietnam) • Sub-national monitoring and reporting systems on ICM effectiveness partially in place in 7 countries (Cambodia, China, Indonesia, Philippines, Thailand, Timor Leste, Vietnam) • National monitoring and reporting system in place in 3 countries (China, Thailand, Vietnam) and partially in place in 3 countries (Indonesia, Lao PDR, Philippines) • 6 PEMSEA ICM Learning Centers operational • Some relevant university level training courses in place in 7 countries (China, Indonesia, 	<ul style="list-style-type: none"> • National and sub-national environmental monitoring programs for ICM sites, coastal seas and priority watersheds provide scientific data and evidence-based data on the effectiveness and impacts of management interventions and commitments • State of Coasts reports published and disseminated by all participating countries • Skills, knowledge and support services of national and sub-national governments enhanced through ICM Communities of Practice, including the PEMSEA Network of Local Governments (PNLG), Regional Task Force/National Task Forces (RTF/NTF), etc. • Evidence-based sound policy on ICM, climate change adaptation and disaster risk reduction (DRR) in priority areas supported by research 	<p>Websites, portals and other information systems</p> <p>M&E and SOC Reports</p> <p>Accomplishment Reports</p> <p>Tripartite reviews</p> <p>Proceedings of EAS Partnerships Council meetings</p>	<p><u>Risk:</u> The SDS-SEA implementation is taking place in 8 countries at national and sub-national levels concurrently. Varying capacities, skills, knowledge, access to resources, information and technologies constrain scaling up of ICM.</p> <p><u>Assumption:</u> Implementation priorities will be based on high level of stakeholder participation and capacity needs assessments. Technical assistance and capacity building initiatives will be customized to local levels, as needed, and also benefit from support of cross-learning, region-wide, knowledge sharing activities.</p> <p><u>Risk:</u> The ICM professional certification program fails to get national policy support due to insufficient understanding of the value, lack of incentives, or existing capacity (e.g. Philippines).</p> <p><u>Assumption:</u> With the</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
		<p>Lao PDR, Philippines, Thailand, Vietnam)</p> <ul style="list-style-type: none"> • ICM professional certification system under development • PNLG membership at 29 (with 2 associate members) • Two RCOEs (Hong Kong and Philippines) established • > 100 RTF / NTF individuals engaged up to 2012 • XWOW conducted successfully in 2013 • Fourth Ministerial Forum and EAS Congress conducted successfully in Korea (2012) • Two national leadership forums conducted (Indonesia and Vietnam) 	<p>results on ecosystem modeling, including total allowable nutrient loading, economic valuation of ecosystem services, and macro-scale zoning of vulnerable coastal and watershed areas</p>		<p>integration of ICM within national frameworks, local and national governments will recognize the need for technical assistance from professionals that have a minimum level of ICM knowledge and exposure in order to implement tools / programs successfully. By increasing awareness of the benefits of using trained ICM professionals, there will be a level of quality control, consistency and sustainability.</p>
<p>Outcome 10: Program contributed to global learning on scaling up of investments in sustainable coastal and ocean management</p>	<p><u>Outputs:</u></p> <ul style="list-style-type: none"> • PEMSEA and IW Learn collaborate in the design and development of a regional EAS KM platform, with linkages to the IW Learn global KM platform • IWLearn and PEMSEA co-organize and conduct at least 2 regional workshops/seminars promoting and facilitating cross-region knowledge and experience-sharing in EAS region, Latin America, Caribbean, South Asia, etc. • PEMSEA participates in 2 IW conferences/ events, sharing best practices and case studies in SDS-SEA implementation • PEMSEA outreach services established with collaborative engagements in at least one other regional sea/LME outside of the EAS region 				
	<ul style="list-style-type: none"> • Number of collaborative/joint initiatives between IW Learn and PEMSEA • Number of assessment reports 	<ul style="list-style-type: none"> • PEMSEA representatives participating regularly in GEF IW Biennial conference • PEMSEA website linked to 	<ul style="list-style-type: none"> • One percent of IW budget committed to the regional knowledge platform to contribute to IWLearn activities, 	<p>IWLearn</p> <p>Accomplishment Reports</p> <p>Mid-term and Final evaluations</p>	<p><u>Risk:</u> LMEs and regional seas programs outside EAS are not aware or incentivized to collaborate with</p>

Objective/ Outcome	Key Indicator(s)	Baseline	End of Project target	Source of Information	Risks and assumptions
	on ICM program development from outreach and exploratory activities	<p>IW Learn website</p> <ul style="list-style-type: none"> Regional KM programs on coastal and ocean management lacking strategy, coordination and sustainability across IW projects, regional organizations and programs Limited outreach activities with non-PEMSEA countries and no strategy or approach to developing such services 	<p>including IWLearn project websites, experience notes and IW Conferences.</p> <ul style="list-style-type: none"> Knowledge and best practice in ICM facilitated by outreach to programs promoting sustainable coastal and ocean development in large marine ecosystems of South Asia, South Pacific, Latin America and Caribbean, etc. 	Proceedings of EAS Partnership Council Meetings	<p>PEMSEA. Moreover PEMSEA will have limited resources to engage in this form of outreach.</p> <p><u>Assumption:</u> Given the documented successes of PEMSEA, and the incoming requests from external and partner agencies, there will be sufficient demand through referrals and cross communications. Consideration will be given to providing incremental funding for PEMSEA to enable this outreach.</p>

List of Outputs per Outcome as Part of the SRF

Project's Development Goal: To reduce pollution and rebuild degraded marine resources in the East Asian Seas through implementation of intergovernmental agreements and catalyzed investments

Project Objective: To catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based blue economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)	
Outcomes	Outputs
A self-sustaining, country-owned, regional mechanism governing and managing LMEs and coastal waters, rebuilding and sustaining ecosystems services and reducing the impacts of climate change on coastal populations in the East Asian Seas region.	<ul style="list-style-type: none"> • Host Country Agreement ratified and implemented with the Government of the Philippines • Formal agreements signed and implemented with PEMSEA Partner Countries, donors and corporate sector in support of a self-sustaining PEMSEA and SDS-SEA implementation • Formal agreements signed with YSLME Commission (to be constituted), WCPF Commission and other regional and sub-regional programmes, regarding collaborative planning, implementation and reporting across organizations, projects and programs under the UNDP GEF East Asian Seas Program • Formal agreement submitted to Ministers of National Focal Agencies of Partner Countries for the adoption of an updated SDS-SEA regional strategy • Updated 5-year SDS-SEA Implementation Plan adopted by the EAS Partnership Council • The impacts and benefits of management interventions of the UNDP GEF East Asian Seas Program, including SDS-SEA, YSLME and WPEA SAPs evaluated and packaged in a Regional State of Oceans and Coasts Report • Regional State of Oceans and Coasts Report submitted to the EAS Congress and Ministerial Forum for approval and dissemination to stakeholders
National and local governments adopting and <i>initiating ocean policy, legal instruments, institutional improvements</i> and programs, and mainstreaming SDS-SEA targets into their medium-term development and investment plans.	<ul style="list-style-type: none"> • 6 participating countries adopted and initiated national coastal and ocean policy, as well as national SDS-SEA implementation plans, supporting legislation and institutional arrangements • 6 countries develop and initiate a national legislative agenda addressing sectoral issues in support of the national ocean policy, including CCA/DRR, integrated land- and sea-use zoning/MSP, etc. • 3 national governments and 8 local governments incorporate SDS-SEA/ICM, CCA/DRR, and SAP/NAP targets into their respective medium-term investment plans and initiate investments • 100 % of participating countries complete and disseminate national SOC reports
Innovative financing mechanisms in place for sustained operation of the country-owned, regional coordinating partnership mechanism	<ul style="list-style-type: none"> • 100 % of the PEMSEA's core operations (i.e., management, administration, planning, fundraising and secretariat services) sustained through a PEMSEA Trust Fund with voluntary commitments from Country and Non-Country Partners, donors and the private

Project Objective: To catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based blue economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

Outcomes	Outputs
	<p>sector/business community and other interested parties</p> <ul style="list-style-type: none"> 100% of PEMSEA's technical services sustained through the delivery of products and services to Partners, Sponsoring Organizations and collaborators (e.g., PSHEMS, ICM and CSR recognition systems) PEMSEA outreach services operationalized to facilitate improved coastal and ocean governance in non-Partner countries in the EAS region and outside of the region and providing a source of revenue to the organization
Increased areal extent of healthy, resilient habitats (i.e., blue forests), including mangroves, coral reefs, sea grass and other coastal habitats/ areas	<ul style="list-style-type: none"> 20% (45,000 km) of the region's coastline covered by ICM programs (geographical scaling up) (Table 11) 100% of the local governments implementing ICM programs (Table 11) complete SOC reports 25% of the local governments implementing ICM programs operationalize effective zoning schemes/MSPs, PA/MPA, EAFM and IRBCAM, and other relevant management tools and processes at identified sites in Tables 12-18, resulting in measurable improvements in the protection and management of ecosystem products and services including: <ul style="list-style-type: none"> 1,000 ha increase in the areal extent of healthy, resilient coastal and marine habitats (i.e., coral reefs; mangroves, sea grass; sea weed) at identified conservation-focused ICM sites (Table 12) 10% improvement in the METT ratings of MPAs and locally managed marine areas (LMMAs) over baseline conditions at identified conservation-focused ICM sites (Table 13) National CSR networks set up in 3 countries (Indonesia, Philippines, Thailand) partnering with national and local governments to scale up ICM programs (Table 11), and catalyzing investments from the public and private sectors in biodiversity conservation (Tables 12 and 13), sustainable fisheries and alternative livelihoods (Tables 14 and 15), water conservation and use management and pollution reduction (Table 16), and climate change adaptation/disaster risk reduction (Table 17).
Improved management of over exploited and depleted fisheries, leading to recovery	<ul style="list-style-type: none"> 2,000 km² of threatened fishing grounds covered by ICM/EAFM management plans (Table 14) with a measured increase in CPUE of 10% over baseline conditions for important fish species 10% of fisher households in identified coastal communities (Table 15) benefit from sustainable alternative livelihood programs 25% increase in household income in fishers' households benefiting from sustainable alternative livelihood programs (Table 15)
Reduced discharge of pollutants from land-based	<ul style="list-style-type: none"> 30,000 km² of priority river basins/coastal areas covered by

Project Objective: To catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based blue economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)	
Outcomes	Outputs
activities and improved water use efficiency/conservation in priority river basins and coastal areas	<p>ICM/IWRM integrated management plans (Table 16), with measured reductions in pollutant loadings (10% for N (6,150 MT) and P (1,100 MT); 20% for BOD (22,500 MT)) using innovative technologies and good management practices consistent with socio-economic and financial implications</p> <ul style="list-style-type: none"> 1,500 households in priority coastal and watershed areas in Cambodia and Lao PDR (Table 16) benefit from improved sanitation (i.e., elimination of raw sewage discharges; BOD reduction 20 MT/annum) and access to safe and reliable water supplies using improved technologies, operations and good management practices consistent with socio-economic and financial implications
Increased preparedness and capability of coastal communities to respond to natural and manmade hazards	<ul style="list-style-type: none"> CCA/DRRM plans, early warning systems and institutional mechanisms in place and functioning in coastal areas that are highly vulnerable to natural and/or manmade hazards (Table 17) 5% of households in highly vulnerable coastal areas relocated away from hazard zones 100% of households in highly vulnerable coastal areas provided with evacuation routes and safe refuge locations Gulf of Thailand Oil Spill Contingency Plan developed and adopted by 3 littoral countries (Cambodia, Thailand, Vietnam) 8 international ports with PSHEMS in place, achieving: 90% compliance with national regulations regarding pollutant discharges from port operations; 25% increase in “green cover” within the port area; 50% reduction in accidental spills from ship and cargo handling operations within the port area
Innovative economic and investment instruments generate funds to rehabilitate and sustain coastal and marine ecosystem services	<ul style="list-style-type: none"> 3 local governments implementing ICM programs adopt economic instruments and investment mechanisms (e.g., revolving funds, CSR, PPP, PES, carbon credits) (Table 18) and demonstrate increased investments in, and sustainability of, protection and rehabilitation of coastal and marine ecosystem services. PPPs established between corporate sector/business community in 3 local governments implementing ICM programs and investments (Table 18) in support of blue economy development and sustainable ecosystem services.
Regional knowledge sharing platform for ecosystem management established and enabling decision makers to translate policies and strategies into actions	<ul style="list-style-type: none"> Regional e-portal established, promoting and facilitating knowledge sharing among at least 3 regional programs implementing SAPs (e.g., PEMSEA: YSLME; WCPFC; others) 50% of local governments implementing ICM programs have established or accessed environmental monitoring programs and information management/decision support systems and prepare SOC reports National SOC reports prepared by 8 participating countries for the EAS

Project Objective: To catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based blue economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

Outcomes	Outputs
	<p>Congress 2015 and made accessible</p> <ul style="list-style-type: none"> • Regional SOC report prepared and submitted to Ministerial Forum 2018 and made accessible • 15 ICM Learning Centers accredited and operational, offering PEMSEA-certified ICM training courses/degree programs • PNLG membership increased by 100% (2011 baseline) • 2 new RCOEs accredited and operational • 2 Triennial Ministerial Forums and EAS Congresses, and annual PNLG Forums and XWOW events organized and conducted to serve as key platforms for information sharing and exchange among key stakeholders • 50 ICM professionals achieved PEMSEA certification • Special skills training modules developed/adapted in the context of ICM programs and translated into local languages covering CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, economic valuation of ecosystem services, MSP/CUZ, SOC and IIMS • Targeted research projects completed in support of improved planning and decision-making, covering risk assessment/vulnerability assessment; environmental monitoring and reporting; ecosystem health report cards; carrying capacity for nutrients; economic valuation of ecosystem services; and zoning for climate change/sea level rise
<p>Program contributed to global learning on scaling up of investments in sustainable coastal and ocean management</p>	<ul style="list-style-type: none"> • PEMSEA and IW Learn collaborate in the design and development of a regional EAS KM platform, with linkages to the IW Learn global KM platform • IWLearn and PEMSEA co-organize and conduct at least 2 regional workshops seminars promoting and facilitating cross-region knowledge and experience-sharing in EAS region, Latin America, Caribbean, South Asia, etc. • PEMSEA participates in 2 IW conferences/ events, sharing best practices and case studies in SDS-SEA implementation • PEMSEA outreach services established with collaborative engagements in one other regional sea/LME outside of the EAS region

Part II: Incremental Cost Analysis

BASELINE TREND OF DEVELOPMENT AND KEY BASELINE PROGRAMS

Table 23. Incremental Cost Matrix

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
BENEFITS			
Global benefits	In the baseline, efforts to reduce / eliminate barriers to sustainable development of coastal and marine areas continue to be conducted by governments on national and local levels, with less attention paid to the potential benefits from regional / trans-boundary approaches which foster collaboration, sharing of knowledge, information, lessons and good practices. In many cases, national political and economic interests override regional cooperative efforts to address trans-boundary issues, and as such, investments in national ocean and coastal development are limited in scope, and less likely to lead to long lasting benefits. Many of the threats evident in the EAS region are also common, in varying degrees, in other parts of the world.	The GEF alternative encourages sharing of good practices in ocean policy development and implementation at the national and local levels, and facilitates the establishment of PEMSEA and the SDS-SEA as the regional mechanism and platform for improved coordination of ocean governance. GEF funding will support activities aimed at developing and initiating partnership agreements and working arrangements between Country Partners in the region, and Non-Country Partners at the international level, and focus on developing financial mechanisms to sustain program operations. Interventions will help develop healthy, coastal ecosystems, strengthened resilience to natural and man-made disasters, and facilitate transfer of the application of ICM tools and instruments, which yield measurable benefits at local, national, regional levels. Effective knowledge management will scale up good practices, lessons learned, innovative tools and approaches which will be accessible on a global scale.	The increment will be a consolidated and transformative set of actions which will serve as a model for other regions, national and sub-national governments at the global level. Sustainable development of coastal and marine areas will be undertaken through a regional coordinating mechanism that enables implementation of regional strategy which features commonly defined goals, objectives and targets. ICM serves as a management and governance framework within which well coordinated, cohesive, scientifically credible, networked sets of actions and support systems hold potential to generate benefits and equitable access at multiple scales. The project will also serve as a model by which other regions can learn how to galvanize commitments to increase levels of investment in ocean and coastal development, using a regional strategy. What makes this important is that this level of cooperation can be achieved in a region where there is a marked social / cultural, economic and environmental heterogeneity across the countries.
National and local benefits	In the baseline, efforts to reduce threats to degradation of coastal and marine resources are moving forward, albeit at a slow pace. This is in view of higher priorities given to economic growth by local and national governments, which tend to place emphasis on short to medium term gains without adequate consideration of the economic, social and environmental costs of inaction, passive / responsive or fragmented	PEMSEA's strategic approach of engagement through forging of partnerships, alliances, networks, communities of practice, serves as a way of bringing communities together to analyze and discuss ways to address shared and common threats to regional, national and local security. The governance framework embodied in ICM, backed by an established regional coordinating mechanism and cadres of highly skilled technical specialists, managers and administrators, provides stakeholders in coastal communities a wider range of options to create enabling conditions to address the manifold challenges to sustainable development of coastal and marine areas. With a portfolio of successful applications of tools, methods and instruments in ICM and IRBCAM, 'scaling up'	Management of trans-boundary water systems and implementation of a full range of policy, legal and institutional investments and reforms lead to sustainable use and maintenance of ecosystem services. Cooperation at the national and local levels will help balance conflicting water uses in river basins, coastal and marine areas within territorial waters as well as transboundary areas, while giving due consideration to building resilience to climate variability and change.

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
	approaches to sustainable development of coastal and marine areas. In this context, threats persist, and in some cases are exacerbated.	of good practices will accelerate the transfer of knowledge in a practical way, and demonstrate the multiple benefits that can be achieved through a “blue economy” focus.	
COSTS			
Component 1: Partnerships in Coastal and Ocean Governance	Baseline: \$20,150,000	Alternative: \$23,586,907	GEF \$2,876,907 NOWPAP \$60,000 MERIT \$500,000 TOTAL \$3,436,907
Component 2: Healthy and Resilient Marine and Coastal Ecosystems	Baseline: \$89,298,109	Alternative: \$111,055,979	GEF \$5,607,870 UNDP \$16,150,000 TOTAL \$22,757,870
Component 3: Knowledge Platform for Building a Sustainable Ocean-Based Blue Economy	Baseline: \$21,879,200	Alternative: \$25,507,478	GEF \$1,628,278 MERIT \$2,000,000 TOTAL \$3,628,278
Project Management	Baseline: \$7,228,158	Alternative: \$7,759,094	GEF \$530,936 xxx xxxx TOTAL \$530,936
TOTAL COSTS	Baseline: \$138,555,467	Alternative: \$167,909,459	GEF \$10,643,992 UNDP \$16,150,000 MERIT \$2,500,000 NOWPAP \$60,000 TOTAL \$29,353,992

SECTION III: TOTAL BUDGET AND WORKPLAN

Award ID:	00076225
Project ID:	00087725
Award Title:	PIMS 4752

Business Unit:	PHL10
Project Title:	Scaling Up Implementation of the SDS-SEA
Implementing Partner (Executing Agency)	PEMSEA

IA	Fund ID	Donor Name	Budget Code	Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD)	Total	Budget Note
COMPONENT 1: PARTNERSHIPS IN OCEAN AND COASTAL GOVERNANCE											
Outcome 1: A self-sustaining, country-owned, regional mechanism governing and managing LMEs and coastal waters, rebuilding and sustaining ecosystems services and reducing the impacts of climate change on coastal populations in the East Asian Seas region.											
Outcome 2: National and local governments; adopting and initiating ocean policy, legal instruments, institutional improvements and programs, and mainstreaming SDS-SEA targets into their medium-term development and investment plans.											
Outcome 3: Innovative financing mechanisms in place for sustained operation of the country-owned, regional coordinating partnership mechanism.											
PEMSEA	62000	GEF	71200	International Consultants	59,600	60,792	62,008	63,248	64,513	310,161	1
			71300	Local Consultants	72,348	74,004	75,693	77,415	79,172	378,632	
			71400	Contractual Services - Individual	128,100	167,320	110,080	94,360	93,300	593,160	
			71600	Travel	65,720	100,382	83,576	43,049	37,444	330,171	
			72100	Contractual Services - Company	253,128	327,328	184,228	186,708	173,458	1,124,850	
			72400	Audio Visual & Communications Equipment	10,000	10,000	10,600	15,300	10,600	56,500	
			74200	Audio Visual & Printing Productions	16,960	3,180	15,900	24,380	23,013	83,433	
				TOTAL	605,856	743,006	542,085	504,460	481,500	2,876,907	

IA	Fund ID	Donor Name	Budget Code	Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD)	Total	Budget Note
COMPONENT 2: HEALTHY AND RESILIENT MARINE AND COASTAL ECOSYSTEMS											
Outcome 4: Increased areal extent of healthy, resilient habitats (i.e., blue forests), including mangroves, coral reefs, sea grass and other coastal habitats/ areas.											
Outcome 5: Improved management of over exploited and depleted fisheries leading to recovery.											
Outcome 6: Reduced discharge of pollutants from land-based activities and improved water use efficiency / conservation in priority river basins and coastal areas.											
Outcome 7: Increased preparedness and capability of coastal communities to respond to natural and manmade hazards.											
Outcome 8: Innovative economic and investment instruments generate funds to rehabilitate and sustain coastal and marine ecosystem services.											
PEMSEA	62000	GEF	71200	International Consultants	66,222	67,546	68,897	70,275	71,681	344,621	2
			71300	Local Consultants	191,176	196,582	202,095	207,719	213,456	1,011,028	
			71400	Contractual Services - Individual	199,413	239,163	236,725	180,015	167,719	1,023,035	
			71600	Travel	59,278	115,882	84,930	60,020	65,956	386,066	
			72600	Grant	505,660	724,020	658,512	396,480	359,168	2,643,840	
			72400	Audio Visual & Communications Equipment	3,180	3,180	3,180	3,180	3,180	15,900	
			74200	Audio Visual & Printing Productions	4,240	20,140	24,380	19,080	115,540	183,380	
				TOTAL	1,029,169	1,366,513	1,278,719	936,769	996,700	5,607,870	

IA	Fund ID	Donor Name	Budget Code	Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD)	Total	Budget Note
COMPONENT 3: KNOWLEDGE PLATFORM FOR BUILDING A SUSTAINABLE OCEAN-BASED ECONOMY											
Outcome 9: Regional knowledge sharing platform for ecosystem management established and enable decision makers to translate policies and strategies into actions.											
Outcome 10: Program contributed to global learning on scaling up of investments in sustainable coastal and ocean management.											
PEMSEA	62000	GEF	71200	International Consultants	19,867	20,264	20,669	21,083	21,504	103,387	3
			71300	Local Consultants	30,432	33,284	36,194	39,161	42,188	181,259	
			71400	Contractual Services - Individual	129,678	130,738	129,678	128,618	127,028	645,740	
			71600	Travel	55,120	87,720	60,420	54,060	56,530	313,850	
			72100	Contractual Services - Company	50,830	58,790	58,260	33,598	25,250	226,728	
			72400	Audio Visual & Communications Equipment	-	-	3,180	6,360	6,360	15,900	
			74200	Audio Visual & Printing Productions	21,200	53,530	18,550	37,004	11,130	141,414	
				TOTAL	307,127	384,326	326,951	319,884	289,990	1,628,278	

IA	Fund ID	Donor Name	Budget Code	Description	Year 1 (USD)	Year 2 (USD)	Year 3 (USD)	Year 4 (USD)	Year 5 (USD)	Total	Budget Note
PROJECT MANAGEMENT											
			71400	Contractual Services - Individual	31,800	32,436	33,085	33,746	34,421	165,488	4
			71600	Travel	2,120	2,120	4,640	2,120	5,840	16,840	
			72100	Contractual Services - Company	7,950	7,950	7,950	7,950	7,950	39,750	
			72500	Stationery and other Office Supplies	2,650	2,703	2,757	2,813	2,868	13,791	
			72800	Information and Technology Equipment	0	12,720	0	12,858	0	25,578	
			73400	Rental, maintenance & operations of equipment	31,800	32,436	33,085	33,746	34,423	165,490	
			71200	International consultant	0	0	42,000	0	62,000	104,000	
				TOTAL	76,320	90,365	123,517	93,233	147,502	530,937	
TOTAL PROJECT BUDGET					2,018,472	2,584,210	2,271,272	1,854,346	1,915,692	10,643,992	

SUMMARY OF FUNDS

Source	Amount Yr 1	Amount Yr 2	Amount Yr 3	Amount Yr 4	Amount Yr 5	Total
GEF	2,018,472	2,584,210	2,271,272	1,854,346	1,915,692	10,643,992
Government (in kind)	23,281,092	27,937,313	24,445,148	19,788,929	20,952,985	116,405,467
Government (cash)	4,430,000	5,316,000	4,651,500	3,765,500	3,987,000	22,150,000
UNDP	3,230,000	3,876,000	3,391,500	2,745,500	2,907,000	16,150,000
MERIT	500,000	600,000	525,000	425,000	450,000	2,500,000
NOWPAP (in-kind)	6,000	6,000	6,000	6,000	6,000	30,000
NOWPAP (in-cash)	30,000					30,000
Total	33,495,564	40,319,523	35,290,420	28,585,275	30,218,677	167,909,459

BUDGET NOTES

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
Component 1 SRF Outcomes 1, 2 and 3 Budget Note 1	71200	International Consultants: Project Manager	106	2915	<ol style="list-style-type: none"> 1. PRF project team contracted and operationalized 2. 5-year work plan developed and agreed to by participating countries, UNDP and PSC 3. Agreements signed with Country and Non-Country Partners, YSLME and WCPFC and other partners 4. Budget and work plans of participating countries developed and finalized 5. Project monitoring and reporting system in place and functioning 6. Suite of products and services developed, adopted and initiated in support of self-sustaining operation of PRF
	71300	National/Local Consultants: Project Staff:			
		a) Recognition, Certification and Partnership Applications Team Leader	60	1007	<ol style="list-style-type: none"> 1. Agreements signed with collaborating government agencies, local governments, national and sub regional programs and projects, etc. in support of SDS-SEA/ICM implementation 2. National project inception workshops conducted 3. 5-year work plans and budgets developed and agreed to with each participating country 4. National SOC reports consolidated into Regional SOC report for submission to Ministerial Forum 5. Regional SOC report published and disseminated 6. Updated SDS-SEA developed and finalized in consultation with Country and Non-Country Partners 7. Revised SDS-SEA Implementation Plan developed and finalized the consultation with Country and Non-Country Partners 8. National ICM legislation developed, finalized and adopted in 3 countries 9. National legislative agenda developed and adopted in 6 countries 10. PSHEM, ICM and CSR recognition systems fully functional and generating revenue for PRF operations 11. Outreach services developed and initiated
		b) Capacity Development/ Knowledge Management Team Leader	40	1007	
		c) ICM Specialists/SDS-SEA Country Project Leaders	276	1007	
	71400	Contract Services: Individual			
		a) Regional Task Force: policy and legal experts	217	1590	<ol style="list-style-type: none"> 1. National legislation reviews 2. Ocean policy briefs 3. National institutional arrangements and options analysis 4. Resource persons for national policy forums 5. Assistance/advice in the preparation of legal documents and cooperation arrangements
		b) National Task Force: national environmental managers/resource	228	530	

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
		managers and specialists c) Technical services covering: training/education; COP networking; knowledge products development; IT support; auditing and recognition; and ICM certification	200	636	<ol style="list-style-type: none"> 6. Methodologies/indicators for national and regional SOC reports 7. Quality assessment/quality control for national and regional SOC reports 8. Technical assistance in preparation of national SOC reports 9. Case studies/good policy practices prepared 10. Resource persons for national consultation workshops 11. Project proposals developed in collaboration with participating countries and local governments for internal and external funding support
	72100	Contract Services: Company		1,124,850 (total cost)	<ol style="list-style-type: none"> 1. Outreach assessments conducted among Non-PEMSEA countries and regions outside of East Asia 2. Mobilization of RCoE/RTF/NTFs to assist in surveys, data gathering and collaborative meetings to establish a portfolio of flagship projects at country and regional levels 3. Promotional materials, activities and events for PEMSEA-branded products and services, including training courses, technical assistance and PSHEM, ICM and CSR recognition/ certification systems 4. Organization and conduct of national inception, mid-term and terminal workshops 5. Organization and conduct of national and regional consultations for updating of SDS-SEA and revisions to the 5-year SDS-SEA Implementation Plan 6. Organization and conduct of national and regional workshops/conferences for SOC reporting systems 7. Organization and conduct of annual EAS Partnership Council/Project Steering Committee meetings
	71600	Travel		330,170 (total cost)	<ol style="list-style-type: none"> 1. Collaborative planning, reporting and assessment project implementation at the sub regional (YSLME, WCPFC, etc.) level and with Non-Country Partners and collaborators (10) 2. Regional workshops/learning sessions at EAS Congress 2015 and 2018 3. National consultations, planning and evaluation workshops (24) 4. Annual PSC meetings (5) 5. National (16) and regional (2) workshops on SOC

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
					development 6. National mid-term and terminal evaluations (16) 7. Missions to non-member countries and other regions regarding outreach services (3)
	72400	Audio Visual & Communications Equipment		56,500 (total cost)	1. Equipment purchase for documentation and recognition of good policy practices and their impact
	74200	Audio Visual & Printing Productions		83,433 (total cost)	1. Translation, publication and dissemination of national SOC reports, policy briefs, SDS-SEA and 5-year SDS-SEA implementation plans 2. Publication of promotional materials for PRF products and services within EAS region and to other regions
Component 2 SRF Outcomes 4, 5, 6, 7 and 8 Budget Note 2	71200	International Consultant: Project Manager	118	2,915	1. Coordinating the planning, implementation, monitoring and evaluation of SDS-SEA/ICM scaling up activities in each participating country and sub regionally 2. Leadership, advice and technical support to project team in development and implementation of national ICM programs 3. Review and approval of contracts issued to individuals and companies for project implementation 4. Review, evaluation and refinement of project work plans and budgets in accordance with progress, constraints and adjustments, in collaboration with participating countries and UNDP 5. Development of partnerships and collaborative activities among regional and sub regional organizations, corporate sector and donors in support of ICM scaling up priorities of countries 6. Participation in national and regional forums regarding SDS-SEA implementation program, impacts and benefits, as well as replication and scaling up of good practices 7. Promotion of public-private partnerships among corporate sector/business community in support of ICM scaling up programs of national and local governments
	71300	National/Local Consultants: Project Staff: a) Recognition, Certification and Partnership Applications Team Leader	200	1,007	1. Planning, development, implementation and coordination, as well as monitoring and evaluation of ICM scaling up activities (Components 4 through 8) in collaboration with more than 50 local governments in 8 participating countries
		b) Capacity Development/ Knowledge	80	1,007	2. Implementation of the ICM Code, PSHEMS Code and CSR Code and Recognition Systems in more than 25

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
		Management Team Leader c) ICM Specialists/SDS-SEA Country Project Leaders	724	1,007	percent of ICM sites, 8 international ports, and 7 PPP arrangements 3. Development and implementation of 8 national capacity development programs in ICM 4. Development and implementation of regional and sub regional special skills training programs covering EBM, EAFM/MPA, CCA/DRR, MSP, IWRM/IRBCAM, nutrient management, total pollutant loading, etc. 5. Mobilization of NTF and RTF networks, ICM Learning Centers, PEMSEA Regional Centers of Excellence, regional programs and projects, donors and the corporate sector in joint and collaborative activities in ICM programs 6. Preparation, packaging and dissemination of technical reports, case studies and lessons learned from ICM scaling up programs in each ICM site/country 7. Delineation, promotion and initiation of ICM programs in priority replication sites, in collaboration with national governments, regional programs and projects and sponsoring organizations 8. Promotion and mobilization of investments in improving management effectiveness and management interventions at the local government level, covering CCA/DRR, EAFM, MPA/MPA networking, IRBCAM/pollution reduction and sustainable livelihoods
	71400	Contract Services: Individual a) Regional Task Force: Specialists/experts in EBM, EAFM/MPA, CCA/DRR, MSP; IWRM/IRBCAM, nutrient management, waste management/pollution reduction, alternative livelihood, eco-business development, oil spill preparedness and response, resource/environmental economics and CSR b) National Task Force: national environmental managers/resource	220 524	1,590 530	1. On-site vulnerability and ecosystem health assessments, as well as valuation of ecosystem services 2. Determination of connectivity, adaptation and networking principles in habitat restoration processes, and advice on restoration techniques 3. Designing, testing and adapting ecosystem health indicator systems for use in ICM sites 4. Development and adaptation of MPA management effectiveness and networking techniques in biodiversity hotspots 5. Technical assistance and advice in the implementation of IRBCAM, TPL and nutrient management practices and technologies in selected watershed and coastal areas 6. Resource persons for special skills training, covering

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
		managers and specialists c) Technical Services covering: training/education; COP networking; knowledge products development; IT support; auditing and recognition; and ICM certification	622	636	ICM tools as well as other management processes including MSP, TPL, EAFM, MPA, PSHEMS, CSR, etc.
	72600	Grant: National and Local Governments		2,643,840 (total cost)	Incremental financing/leverage to 8 national governments and more than 50 local governments for the development and implementation of national ICM programs including: 1. National ICM capacity development programs initiated in 8 countries 2. Application of ICM tools as well as other management processes including SOC reporting, IIMS, CS/CSIP, MSP, MPA/MPA networking, CCA/DRR at local level 3. Environmental monitoring program design and implementation 4. Support to seed capital for small-scale livelihood activities 5. Assessment of impacts targeted management interventions (CCA/DRR; MPA; EAFM; IRBCAM; MSP; etc.) and ICM governance systems, in terms of social, economic and ecological benefits 6. Recommendations, strategies and investment plans for replication and scaling up good policies and practices. 7. Testing, evaluation and scaling up of investments in economic instruments and mechanisms for sustainable livelihoods in coastal communities, and especially focused on poor fisher folks
	71600	Travel		386,064 (total cost)	1. Participants attending national (32) and regional (10) training workshops covering ICM and special skills capacity development 2. Mobilization of regional (20) and national (80) task force members, experts and specialists in support of national ICM programs and management interventions at the local level
	72400	Audio Visual & Communications Equipment		15,900 (total cost)	1. Equipment purchase for documentation of management interventions, good practices and changes occurring on- the-ground as a consequence of ICM programs
	74200	Audio Visual & Printing Productions		183,380 (total cost)	1. Translation and publication of technical reports, case studies, lessons learned and good practices from project

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
					implementation 2. Development of multi-media materials for dissemination of good practices to primary stakeholders within and outside the region via conventional means and social networks
Component 3 SRF Outcomes 9, 10 and 11 Budget Note 3	71200	International Consultant: Project Manager	36	2,915	1. Organization and conduct of policy dialogues between national and local governments, civil society organizations, private sector, etc; 2. Policy advocacy to prioritize key issues in coastal and marine affairs in high-profile events such as EAS Congress, XWOW, PNLG Annual Forum and other forums 3. Promotion of mainstreaming investments in ICM, CCA/DRR and SAP/NAP targets into national and local governments' development and investment plans 4. Participation in regional and global events, sharing best practices from SDS-SEA implementation
	71300	National/Local consultants: Project Staff			
		a) Capacity Development/ Knowledge Management Team Leader	140	1,007	1. Organization and coordination of targeted research to gather evidence of sound policy, CCA/DRR, EAFM, MPA/MPA networks, ecosystem modeling, total allowable nutrient loading, sustainable livelihoods, etc. 2. Design, development and start-up of integrated environmental monitoring programs at ICM sites to assess changes in ecosystem health as a consequence of management interventions
		b) ICM Specialists/SDS-SEA Country Project Leaders	40	1,007	3. National SOC report published 4. Development, adaptation, refinement and translation of ICM training modules including modules on CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, MSP, etc. 5. Development and initiation of ICM professional certification 6. Implementation of PNLG action plan for blue economy development 7. PEMSEA Expert Advisory group established and coordinating the development of the regional SOC 8. Establishment and start-up of 15 new ICM Learning centers and 2 new PEMSEA RCoES 9. Establishment and start-up of PEMSEA outreach service in one LME outside of the EAS region

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
	71400	Contract Services: Individual a) National Task Force: national environmental managers/resource managers and specialists b) Technical Services covering: training/education; COP networking; knowledge products development; IT support; auditing and recognition; and ICM certification	160 882	530 636	<ol style="list-style-type: none"> 1. Implementation of improved water quality monitoring systems at the local government level and preparation of SOC reports 2. Design, development and start-up of integrated environmental monitoring programs at ICM sites to assess changes in ecosystem health as a consequence of management interventions 3. National SOC report published 4. Development, adaptation, refinement and translation of ICM training modules including modules on CCA/DRR, risk/vulnerability assessment, EAFM, MPA/MPA networking, MSP, etc. 5. Development and initiation of ICM professional certification 6. Implementation of PNLG action plan for blue economy development
	72100	Contract Services: Company		226,728 (total cost)	<ol style="list-style-type: none"> 1. Targeted research (5 projects) in support of SDS-SEA implementation, covering social, economic and ecological uncertainties and benefits assessment 2. Regional workshops (3) to promote and facilitate cross-region and cross organization knowledge sharing and partnership building
	71600	Travel		313,850 (total cost)	<ol style="list-style-type: none"> 1. Learning visits (2) for policymakers and local chief executives (LCEs) to ICM sites/LMEs for on-the-ground experience in blue economy development 2. Travel to seminars/workshops (5) for senior policymakers and LCEs on investments in blue economy development through ICM 3. Resource persons and trainers for national (32) and regional training (10) workshops 4. Resource persons for annual PNLG, XWOW, IWLearn regional conferences 5. Travel to LME outside of EAS region (2) to explore, negotiate and finalize outreach service 6. Regional participation in GEF IW conferences (2) 7. Resource persons participation in EAS Congress 2015 and 2018 International Conferences and Ministerial Forums
	72400	Audio Visual & Communications Equipment		15,900 (total cost)	<ol style="list-style-type: none"> 1. Equipment purchase for documentation of management interventions, good practices and changes occurring on-the-ground as a consequence of ICM programs

Component SRF Outcome Budget Note	Budget Code	Budget Description	Time (wk)	Cost (USD/wk) (except where noted otherwise)	Targeted Inputs/Outputs
	74200	Audio Visual & Printing Productions		141,414 (total cost)	<ol style="list-style-type: none"> 1. Publication of training modules, case studies, SOC reports, policy briefs and other communication and knowledge products 2. Production of multi-media knowledge product and services on-line, in support of knowledge sharing and knowledge application in policy making and decisions concerning investments in ICM, sustaining ecosystem services and blue economy
Project Management Budget Note 4	71400	Contract Services: Individual PRF Finance and Admin Support	780	212	1. Project/admin support
	71600	Travel		10,600 (total cost)	2. Local travel costs/petro
	72100	Contract Services: Company		39,750 (total cost)	3. Office cleaning and maintenance
	72500	Stationery and other Office Supplies		13,791 (total cost)	4. Office supplies i.e. toner, paper etc
	72800	Information Technology equipment		25,578 (total cost)	5. Information Technology Equipment: PC, server, printer and computer software. For effective management of operation of the project management office
	73400	Rental, maintenance & operations of equipment		165,490 (total cost)	6. Office space cost sharing and equipment maintenance fee
	71200	International consultants		110,240 (total cost)	7. Mid-term and terminal evaluation of the project

PROJECT WORK PLAN

Scaling-up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

ID	Task Name	Year 1				Year 2				Year 3				Year 4				Year 5			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	COMPONENT 1: PARTNERSHIPS IN COASTAL AND OCEAN GOVERNANCE																				
2	OUTCOME 1: A self-sustaining, country-owned regional mechanism governing and managing LMEs and coastal waters																				
3	Output 1.1: Signed Agreements with country and non-country partners on voluntary financing and in-kind commitments to sustain PEMSEA's core operations																				
4	1.1.1 Organize and implement a collaborative planning and assessment system within PEMSEA, in order to determine progress, achievements, needs and new opportunities for financing and investing in national and regional SDS-SEA Implementation Plans																				
5	1.1.2 Identify, develop, adapt and refine products and services to help Country and Non-Country Partners and other stakeholders in the EAS region overcome constraints in SDS-SEA implementation																				
6	1.1.3 Implement the Sustainable Financing Plan and Road Map as adopted by the EAS Partnership Council in 2011, including the following activities that will contribute to achieving a self-sustained country-owned regional mechanism																				
7	1.1.4 Negotiate and sign agreements with PEMSEA Country and Non-Country Partners, donors and corporate sector confirming commitments to PEMSEA operations and sustainability																				
8	Output 1.2 Signed Partnership Agreements between PEMSEA and YSLME Commission, WCPF Commission and other regional governance mechanisms																				
9	1.2.1 Conduct joint consultations and collaborative planning with YSLME Commission, WCPFC and other regional organizations, including relevant regional economic mechanisms of ASEAN and APEC, to align strategic objectives, action plans and activities																				
10	1.2.2 Identify areas to cooperate, including strengthening of coordinating mechanisms and arrangements, information sharing, joint and collaborative implementation of projects, development of knowledge products and informative materials																				
11	1.2.3 Develop and implement a project coordinating, reporting, monitoring and evaluation, and information sharing system among the three projects of the EAS Program																				
12	1.2.4 Negotiate and sign agreements with the YSLME Commission and WCPF Commission on collaborative planning and implementation and reporting (EAS Congress 2015), and with other regional mechanisms by the end of the project																				
13	Output 1.3 The EAS program monitored, evaluated and reported to stakeholders via Regional State of Oceans and Coasts Report																				
14	1.3.1 Organize a PEMSEA Expert Advisory Group (PEAG) to review, evaluate and update the SDS-SEA and to provide guidance, direction and oversight on the preparation of a Regional State of Oceans and Coasts Report for the EAS region																				
15	1.3.2 Conduct national / regional consultations/assessments among governments, regional organizations, partners, collaborators and other stakeholders regarding contributions, impacts and benefits derived from regional, LME and national programs, etc.																				
16	1.3.3 Prepare a Regional State of the Oceans and Coasts report for dissemination, review and input from stakeholders groups at the regional, subregional/LME and national levels																				
17	1.3.4 Submit the updated SDS-SEA and endorsed Regional State of the Oceans and Coasts Report to the Ministerial Forum 2018 for adoption by the Ministers of PEMSEA Partner Countries (EAS Congress 2018).																				
18	1.3.5 Formulate and submit an updated 5-year regional SDS-SEA Implementation Plan to the EAS Partnership Council 2018, based on the updated SDS-SEA																				










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19	OUTCOME 2: National and local governments adopt and initiate ocean policy and institutional improvements																				
20	Output 2.1 Improved national coastal and ocean policies and institutional arrangements for sustainable management of priority coastal and marine areas, surrounding watershed and blue economy development initiated in at least 6 participating countries																				
21	2.1.1 Develop and disseminate case studies/good practices on ICM and blue economy																				
22	2.1.2 Organize national forums/workshops to build awareness and consensus on need for national ocean policy/ICM legislation, and prepare relevant reports																				
23	2.1.3 Provide technical assistance for the drafting, submission and reviews of national ocean policy and ICM legislation																				
24	2.1.4 Promote and facilitate the adoption of national ocean policy, ICM policy and legislation and supporting institutional mechanisms in Cambodia, China, Indonesia, Philippines, Thailand, Timor Leste and Vietnam																				
25	2.1.5 Publish and disseminate National State of Oceans and Coasts Reports in all 8 participating countries for the EAS Congress 2015 (Note: State of River Basins Report in the case of Lao PDR).																				
26	Output 2.2 National sector legislative agenda developed in at least 6 participating countries on ICM, CCA/DRR, integrated land and sea use zoning/marine spatial planning and other innovative regulatory and economic instruments																				
27	2.2.1 Review and assess sector-based policies and legislation and prepare and disseminate analytical reports																				
28	2.2.2 Prepare and disseminate case studies and policy briefs related to best practices in ICM, CCA/DRR, integrated land and sea use, MSP, sustainable fisheries, water use and conservation management,																				
29	2.2.3 Conduct national forums/workshops to build consensus on legislative agenda and priorities, including ratification of international conventions, etc.																				
30	2.2.4 Design and implement communications and advocacy campaigns in support of proposed policies/laws targeting policy makers at national and local levels																				

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31	Output 2.3 SDS-SEA targets incorporated into national and local medium-term development and investment plans in at least 3 participating countries and 8 participating local governments, etc.																				
32	2.3.1 Strengthen, develop/activate internet-based information access through websites, portals that are regularly updated, refreshed and maintained with functionalities that permit data mining, query, keyword searches, trending reports etc.																				
33	2.3.2 Organize and conduct national and regional training workshops, seminars and forums in support of SDS-SEA and ICM scaling up and blue economy development.																				
34	2.3.3 Engage and capacitate the Twinning Secretariat for IRBCAM to foster more meaningful exchanges, expand technical scope and integrate with other knowledge management platforms.																				
35	2.3.4 Set up and implement a functional platform to promote, facilitate, structure and package projects and investments in support of SDS-SEA and ICM scaling up and blue economy development in the EAS region.																				
36	2.3.5 Continue to support, build up and strengthen outreach of Xiamen World Ocean Week (XWOW) as a regional/global venue for demonstration of good practices, building alliances and sharing of knowledge, ideas and experience in ICM implementation.																				
37	2.3.6 Support the triennial Ministerial Forum as part of the EAS Congress to engage leaders and policymakers to secure commitments on decisions affecting the blue economy.																				
38	2.3.7 Support the triennial EAS Congress, which serves as a venue for multi-donor collaboration and participation in investments in scaling up of ICM implementation.																				
39	2.3.8 Organize and convene policy forums to increase awareness and understanding of policymakers, including linkages with annual trainings/forums of national and regional partners and collaborators.																				
40	2.3.9 Facilitate local/national policy/technical workshops and PNLG forums to engage local governments, civil society and private sector in investment-related dialogue.																				
41	2.3.10 Conduct of national coastal and ocean governance forums, seminars and study tours among national and local leaders in participating countries, including participation in PNLG Forums, Xiamen World Ocean Week (XWOW) and EAS Congresses.																				
42	2.3.11 Provide technical assistance and advice to line agencies and decision makers at national and local levels in support of mainstreaming SDS-SEA / ICM Implementation Plans and targets into national and local government investment plans.																				

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43	OUTCOME 3: Innovative financing mechanisms in place for sustained operation of the country-owned regional																												
44	Output 3.1 Suite of products, services, funding mechanisms and partnership arrangements adopted and implemented in collaboration with Partners, Sponsoring Organizations, donors and private sector/business community																												
45	3.1.1 Consult with PEMSEA Partners, Non-Country Partners, private/corporate sector and other collaborators to update the PEMSEA Sustainable Financing Plan and																												
46	3.1.2 Develop, refine and promote the suite of PEMSEA branded products and services, including training courses, technical assistance and ICM recognition/ certification																												
47	3.1.3 Conduct surveys, data-gathering and collaborative meetings with PEMSEA Partners, Non-Country Partners and other external sources of funding to develop and																												
48	3.1.4 Develop, promote and negotiate the establishment and operationalization of a PEMSEA Trust Fund through voluntary contributions from Country and Non-Country Partners, donors, the private sector/business community																												
49	3.1.5 In collaboration with GEF, UNDP and other international organizations, explore opportunities for the development of outreach services etc.																												

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50	COMPONENT 2: HEALTHY AND RESILIENT MARINE AND COASTAL ECOSYSTEMS																				
51	OUTCOME 4: Increased areal extent of healthy, resilient habitats, including mangroves, coral reefs, sea grass and																				
52	Output 4.1 ICM program coverage extended to 20 percent (45,000 km) of the region's coastline, with scaled-up national and local ICM program implementation in 8 participating																				
53	4.1.1 Develop agreements / coordinating arrangements with concerned national agencies and local governments for scaling up ICM implementation to cover at least 20% of the region's coastline, as measured at the regional and																				
54	4.1.2 Complete scoping studies / needs assessments at national and local levels for achieving the regional and																				
55	4.1.3 Organize ICM capacity enabling/technical support services and networks in each participating country on the application of the ICM cycle and the corresponding tools																				
56	4.1.4 Train/establish a core group of experienced personnel and stakeholders among the sites identified in Table 11, with the capacity to manage and coordinate the development and implementation of national ICM																				
57	4.1.5 Promote and facilitate the adoption and implementation of PEMSEA's IIMS and State of Coasts reporting system and test, refine and roll-out ICM Code and Recognition System among national and local																				
58	4.1.6 Organize and conduct ICM forums, workshops, roundtables and other information-sharing/partnership development events focused on encouraging private sector participation in the development and																				
59	Output 4.2 Increased proportion of coastal and watershed areas and LMEs have zoning schemes, MSPs, PAs/MPAs, EAFM, IRBCAM and other management processes in place and functioning effectively as part of ICM programs																				
60	4.2.1 Conduct regional partners' workshops to review, adapt and agree on the tools, approaches and indicators to be applied in the planning, development, implementation and monitoring of conservation-focused																				
61	4.2.2 Establish and support pilot projects at selected ICM sites in each participating country, (Tables 12-18), to demonstrate the planning and operationalization of zoning schemes / MSPs, PAMPA, EAFM and IRBCAM, etc.																				
62	4.2.3. Monitor and assess the scope (i.e., increased proportion of coastal areas benefiting from the management schemes) and benefits derived from the management interventions, including management																				
63	4.2.4 Promote and facilitate the replication of best practices and lessons learned from the pilot sites, including the development or strengthening of national and local policies and legislation covering the management																				
64	4.2.5 Organize and conduct special skills training programs for ICM practitioners and managers, as well as ICM seminars for planners and decision-makers, in collaboration with national and local governments, the																				
65	4.2.6 Mobilize the regional and national support networks to assist local governments with the start up/scaling up of ICM programs, including preparation of baseline SOC reports on existing social, economic and ecological																				
66	4.2.7 Assist local governments with the preparation of end-of-project SOCs, including social, economic and environmental changes and trends, and the effectiveness																				

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66	Output 4.3 Measurable improvements in the areal extent, health and resiliency of habitats in coastal waters and watershed areas, including biodiversity hotspots and areas-at-risk to climate change																				
67	4.3.1 Conduct baseline assessment and valuation studies on the ecosystems' products and services in selected sites in Table 12 with a focus on mangroves, coral reefs and seagrass habitats, using methodologies and indicators etc.																				
68	4.3.2 Support risk/vulnerability assessments of the coastal habitats at the sites (i.e., blue forests) and coastal communities, including threats from conflicting uses and anthropogenic and natural hazards (e.g., oil spills, climate change).																				
69	4.3.3 Identify and prioritize issues, threats, priorities and goals of improvements in the areal extent, health and resiliency of the identified habitats in coastal waters and watershed areas of the sites in Table 12, etc.																				
70	4.3.4 Develop a conservation-focused coastal strategy/coastal strategy implementation plan, including priority actions, coordinating mechanism, roles and responsibilities of stakeholders, budget and resource allocations, financing mechanisms etc.																				
71	4.3.5 Launch the conservation-focused pilot demonstration projects, including required training programs and communication plans designed to build awareness and facilitate local government, coastal community and stakeholders' awareness etc.																				
72	4.3.6. Implement local government and coastal community monitoring and reporting systems to track indicators of ecosystem health and resilience, i.e., a healthy habitat reporting system, as agreed in Activity 4.3.1.																				
73	4.3.7. Prepare an updated ecosystem health report card/SOC report after 3 years of operation, to evaluate the progress, achievements and shortcomings of the conservation-focused ICM pilot demonstration,																				
74	4.3.8. Develop/package relevant knowledge products and convene national and regional technical workshops to inform decision-makers and disseminate information on best practices.																				
75	Output 4.4 Strengthened MPAs functioning effectively in priority coastal and marine biodiversity areas, demonstrating improved management effectiveness, sustainability and benefits																				
76	4.4.1 Assess the management and ecological networking effectiveness of the priority sites identified in Table 13 (as relevant) using agreed indicators from Output 4.2 (e.g., Management Effectiveness Tracking Tools (METT indicators)																				
77	4.4.2 Conduct baseline assessment and valuation studies on the ecosystems' products and services in selected sites in Table 13 using methodologies and indicators as agreed under Output 4.2, etc.																				
78	4.4.3 Support risk/vulnerability assessments of the PAs/MPAs and MPA networks, including threats from conflicting uses and anthropogenic and natural hazards (e.g., oil spills, climate change).																				
79	4.4.4 Identify and prioritize issues, threats, priorities and goals of improvements in the management effectiveness of the PA/MPA and networks in Table 13, in collaboration with the concerned local governments, coastal communities etc.																				
80	4.4.5 Based on identified priorities, goals, gaps and weaknesses, develop, adopt and initiate habitat protection, restoration and management plan for improvements in management effectiveness and ecological networking programs within the ICM programs etc.																				
81	4.4.6. Launch MPA-focused pilot demonstration projects, including required training programs and communication plans designed to build awareness etc.																				
82	4.4.7. Prepare an updated ecosystem health report card/SOC report after 3 years of operation, to evaluate the progress, achievements and shortcomings of the MPA-focused ICM pilot demonstration, etc.																				
83	4.4.8. Prepare and disseminate case studies and technical reports on best practices and lessons learned.																				

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84	OUTCOME 5: Improved management of overexploited and depleted fisheries, leading to recovery																				
85	Output 5.1 Innovative fisheries management schemes (i.e., ICM/EAFM) developed and implemented using ecosystem-based approach to reduce overexploitation in selected threatened fishing grounds																				
86	5.1.1 Conduct baseline studies, as required, to determine physical, biophysical, economic and social conditions																				
87	5.1.2. Develop/adapt/refine and implement "healthy fisheries" monitoring and SOC reporting systems/ at the ICM sites identified in Table 14, based on methodologies and indicators agreed to under Output 4.2, etc.																				
88	5.1.3 Determine socioeconomic and ecological impacts of alternative management interventions (e.g., reduce fishing pressure; improve fish prices; implement IUU regulations; closed fishing season).using available DSS models (e.g., FISH DA; TURF)																				
89	5.1.4 Support risk/vulnerability assessments on the coastal fisheries, habitat, aquaculture operations and fishing communities, including threats from anthropogenic and natural hazards (e.g., oil spills, climate change).																				
90	5.1.5 Develop, adopt and implement pilot demonstration projects on the integration of EAFM programs into the ICM frameworks and processes of local governments as listed in Table 14 etc.																				
91	5.1.6. Prepare an updated healthy fisheries report card/SOC report after 3 years of operation to evaluate the progress, achievements and shortcomings of the EAFM-focused ICM pilot demonstration etc.																				
92	5.1.7 Convene national and regional technical workshops to review and assess ICM programs and disseminate knowledge on best practices through case studies, guidelines and SOC reporting.																				
93	Output 5.2 Reduced stress on coastal fisheries and improved household incomes, with implementation of alternative/ supplemental livelihood policies, capacities and incentive programs in coastal communities																				
94	5.2.1 Conduct social assessment/social preparation activities in the identified priority sites, identifying potential beneficiaries, particularly very poor fishers, women and indigenous peoples, including awareness building and training etc.																				
95	5.2.2 Conduct feasibility studies on livelihood development and implementation opportunities that support the establishment and development of financially sustainable and ecosystem-friendly livelihood activities etc.																				
96	5.2.3 Assist organized community groups to identify, develop and pilot-test eco-business enterprises identified in feasibility studies, including training and extensions																				
97	5.2.4 Link borrowers to existing microfinancing schemes that can be tapped for identified income-generating projects																				
98	5.2.5 Provide marketing assistance and linkages with suppliers and buyers, as required																				
99	5.2.6 Evaluate the socio-economic and sustainability of the eco-business, to determine scaling-up and replication potential of the pilot demonstration projects within the priority site, and among other fishers communities																				
100	5.2.7 Prepare case studies and policy briefs for promotion to Local Chief Executives, national policymakers, donors and the corporate sector for scaling up and replication and mainstreaming into development plans																				

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101	OUTCOME 6: Reduced discharge of pollutants from land-based activities and improved water use efficiency/conservation in priority river basins and coastal areas																				
102	Output 6.1 Reductions of pollutants (e.g., N; P; BOD) measured in priority river basins and coastal areas																				
103	6.1.1 Provide training and capacity building in modeling of pollutant loadings and ecosystems responses in priority river basins and coastal areas																				
104	6.1.2 Prepare Total Allowable Pollutant Load assessments for each priority watershed/coastal area using available mass loading/water quality/ecosystem impact models/commercial software packages																				
105	6.1.3 Conduct social, economic and ecological evaluations of watersheds and coastal areas, water users and water functions using methodologies and indicators agreed to under Output 4.2.																				
106	6.1.4 Assess alternative pollutant reduction good practices, approaches and technologies for priority pollutants in the watershed area, including socio-economic and financial implications, including the application of innovative technologies and practices																				
107	6.1.5 Assist national and local governments in the priority areas to formulate, develop and initiate pollution reduction implementation plans and investments, in collaboration with stakeholders in the public and private sectors																				
108	6.1.6 Establish/strengthen integrated water quality monitoring programs, and build capacity for respective agencies to develop/implement a system for water quality reporting and information sharing																				
109	6.1.7 Conduct regional/national technical workshops to review, assess and disseminate IRBCAM progress, achievements and best practices																				
110	Output 6.2 Innovative technologies and good practices in nutrient management and water use conservation demonstrated in priority coastal areas and river basins																				
111	6.2.1 Review case studies/good practices evaluations of brown investment projects conducted under the GEF/WB Scaling up Partnership Investments for Sustainable Development of the Large Marine Ecosystems of East Asia and their Coasts etc.																				
112	6.2.2 Support regional/national technical workshops to analyze water use/conservation and pollution reduction options in priority river basins and coastal areas																				
113	6.2.3 Promote the adoption/internalization of innovative policies, technologies and practices into national and local government development and investment plans (linked to Output 2.3)																				
114	6.2.4 Facilitate the implementation of pollution reduction strategies and investment plans/replication of innovative policies and practices in partnership with selected national and local governments and investors as identified in Table 16																				
115	6.2.5 Conduct regional / national technical workshops to review, assess and disseminate IRBCAM progress, achievements and good practices																				

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116	OUTCOME 7: Increased preparedness and capability of coastal communities to respond to natural and manmade hazards																				
117	Output 7.1: Adaptive management measures implemented in ICM sites to reduce impacts of climate change, improve oil spill preparedness, and strengthen maritime safety measures																				
118	7.1.1 Conduct studies on the socio-economic impact of specific natural and anthropogenic hazards, including climate change at the pilot demonstration projects.																				
119	7.1.2 Support studies/assessments of the effectiveness of emergency response, compensation and other factors related to community resiliency, including community awareness and linkages between local and national systems etc.																				
120	7.1.3 Build capacity of local and national governments/agencies to prepare hazard/vulnerability maps, particularly to identify and evaluate vulnerable coastal and watershed areas, resources, habitats, coastal communities etc.																				
121	7.1.4 Facilitate formulation and adoption of CCA/DRR programs, including adapting to, preparing for, and recovering from, natural and anthropogenic disasters at the pilot demonstration sites																				
122	7.1.5 Support regional/national workshops CCA/DRR best practices, lessons learned and investment strategies for national and local government officials																				
123	7.1.6 Based on the experience of the pilot demonstration sites, conduct regional and national workshops and seminars etc.																				
124	Output 7.2 Port Safety Health and Environmental Management (PSHEM) Code adopted as an international standard for voluntary use in ports of participating countries																				
125	7.2.1 Organize collaborative meetings and regional forum with potential partners to create awareness and understanding of benefits of the PSHEM Code																				
126	7.2.2 Identify and enable training institutions and PSHEMS trainers to deliver programs for governments and responsible agencies																				
127	7.2.3 Develop and implement training and PSHEM recognition programs in priority ports (refer to Table 17).																				
128	7.2.4 Prepare and disseminate case studies, support study tours, and create awareness in order to encourage governments/responsible agencies to scale up PSHEMS implementation																				

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129	OUTCOME 8: Innovative economic and investment instruments generate funds to rehabilitate and sustain coastal and marine ecosystem services																						
130	Output 8.1: Innovative economic and investment mechanisms (e.g., revolving funds, PPP, PES, carbon credits) tested and applied to help participating countries' national and local governments sustain and scale up ICM programs																						
131	8.1.1 Develop and disseminate case studies on best practices in sustainable financing and blue economy development from within the region and globally, with focus on a range of possible approaches and modalities, policies, insititutional arrangements etc.																						
132	8.1.2 At the identified ICM sites (Table 18) and in collaboration with national and local governments and coastal communities, develop pilot demonstration projects aimed at testing ecosystem-based assessment tools etc.																						
133	8.1.3 Provide training and capacity building for local governments on best practice in developing enabling governance frameworks for blue economy investments																						
134	8.1.4 Support national and regional workshops/forums focused on blue economy to promote the replication and scaling up of best practices in economic and investment mechanisms etc.																						
135	Output 8.2: Corporations and the business community engaged as partners of local governments in ICM programs																						
136	8.2.1 Identify investment/collaborative opportunities for the corporate sector/business community to partner with local governments implementing ICM as identified in Table 18.																						
137	8.2.2 Develop and promote a CSR roadmap among the corporate sector/business community and facilitate public-private partnerships (PPP) with local governments implementing ICM programs																						
138	8.2.3 Organize and conduct a "blue economy" business forum in collaboration with the PNLG to serve as a marketplace for blue economy projects and PPP with local governments implementing ICM programs																						
139	8.2.4 Develop and publish studies on good practices in CSR in the context of ICM implementation, emphasizing the 'business case'																						
140	8.2.5 Develop and implement a recognition system for the corporate sector/business community as an incentive mechanism to support ICM scaling up programs and blue economy development in partnership with local governments of the region																						

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141	COMPONENT 3: KNOWLEDGE PALTFORM FOR BUILDING A SUSTAINABLE OCEAN-BASED BLUE ECONOMY																				
142	OUTCOME 9: Regional knowledge sharing platform for ecosystem management established and enabling decision makers to translate policies and strategies into actions																				
143	Output 9.1 National and sub-national environmental monitoring programs for ICM sites, coastal seas and priority watersheds providing scientific and evidenced-based data on the effectiveness and impacts of management interventions and commitments																				
144	9.1.1 Engage national and local governments, corporate sector, universities and other stakeholders to establish/ strengthen marine water quality monitoring programs. Forge partnership agreements																				
145	9.1.2 Develop and implement training and capacity development programs																				
146	9.1.3 Establish/strengthen water quality monitoring laboratories at priority ICM sites in partnership with national and local governments, local stakeholders, donors and/or the business community																				
147	9.1.4 Set up information/decision support mechanisms at local and national levels (e.g., IIMS), which are supported by fully operational integrated environmental monitoring programs																				
148	Output 9.2: State of the Oceans and Coasts Reports published and disseminated by participating countries																				
149	9.2.1 Support national and regional training on IIMS and SOC reporting systems																				
150	9.2.2 Facilitate preparation of SOC reports for purposes of planning, assessment and decision making at the local government level																				
151	9.2.3 Disseminate SOC reports in a timely manner and through accessible portals, including the PEMSEA website.																				
152	9.2.4 Strengthen PEMSEA's webiste as a regional and global knowledge center for ICM program development and implementation by expanding the scope and coverage of methodologies, approaches, case studies, best practices and impacts and benefits, etc.																				

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ID	Task Name	Year 1				Year 2				Year 3				Year 4				Year 5			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
153	Output 9.3: Skills, knowledge and support services of national and sub-national governments enhanced through ICM Communities of Practice, including the PEMSEA Network for Local Governments (PNLG), Regional Task Force/National Task Force (RTF/NTF), etc.	■																			
154	9.3.1 Identify, assess and build capacity of ICM Learning Centers (LCs) to be accredited by PEMSEA. Facilitate networking of LCs, and assist in delivery of training and support services to local governments and stakeholders at ICM sites	■																			
155	9.3.2 Develop/refine ICM training modules to be compliant with standards for PEMSEA certification (e.g., CCA/DRR, risk/ vulnerability assessment, EAFM, MPA/MPA networking, marine spatial planning, coastal use zoning, State of Coasts, IIMS, etc.)	■																			
156	9.3.3 Translate ICM training modules into local working languages as required, and disseminate to ICM Learning Centers	■																			
157	9.3.4 Collaborate with national agencies, universities and certification institutions to develop/finalize and initiate ICM professional certification system	■																			
158	9.3.5 Strengthen the operation of the PNLG as a advocacy network for ICM program development and implementation and facilitate the implementation of the PNLG action action plan for blue economy development through ICM	■																			
159	9.3.6 Identify/assess and engage potential Regional Centers of Excellence to provide specialized scientific and technical advice for IEMP, SOC, risk/vulnerability assessments and management, among others	■																			
160	9.3.7 Update/build up national and regional task forces of professionals, experts and service providers which can be mobilized to deliver training and technical assistance services for PRF and/or ICM priority sites	■																			
161	Output 9.4: Evidence-based sound policy on ICM, climate change adaptation and disaster risk reduction (DRR) in priority areas supported by research results on ecosystem modeling, including total allowable nutrient loading, etc.	■																			
162	9.4.1 In collaboration with participating countries and partners (Table 10) develop and conduct targeted research projects to support the formulation, adoption and implementation of sound policies and decisions in ICM, CCA and DRR etc.	■																			
163	9.4.2 Set up and operationalize a regional level scientific and expert advisory group(s) to develop methodologies, identify indicators and guide the preparation of national and regional SOC reports	■																			

Scaling-up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)

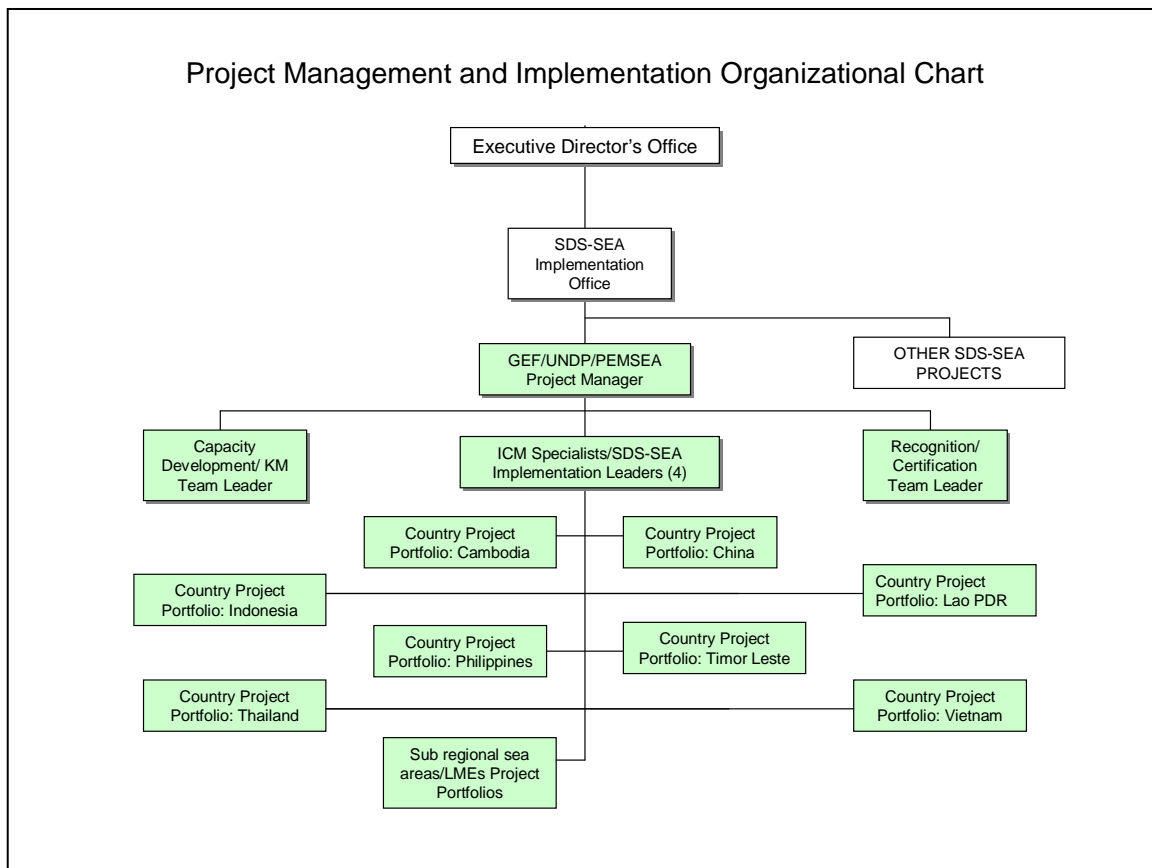
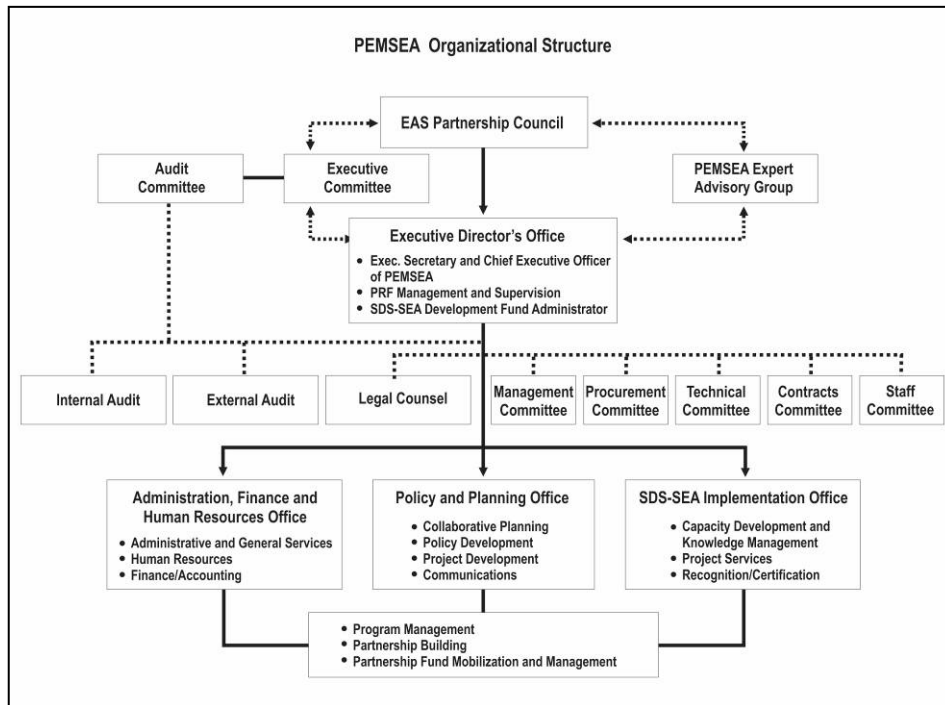
ID	Task Name	Year 1				Year 2				Year 3				Year 4				Year 5			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
164	OUTCOME 10: Program contributed to global learning on scaling up investments in sustainable coastal and ocean management																				
165	Output 10.1: One percent of IW budget allocated to the regional knowledge platform to contribute to IWLearn activities, including IWLearn project websites, experience notes and IW Conferences																				
166	10.1.1 Organize and conduct international workshops/forums to facilitate cross-region interaction and experience in coastal and ocean management/IW trans-boundary priorities																				
167	10.1.2 Support participation of PEMSEA in IW conferences/events, sharing good practices and case studies in SDS-SEA implementation																				
168	Output 10.2: Knowledge and best practice in ICM facilitated by outreach to programs promoting sustainable coastal and ocean development in large marine ecosystems of South Asia, South Pacific, Latin America and Caribbean, etc.																				
169	10.2.1 Develop an outreach policy and protocol for a PEMSEA-facilitated outreach service to non-member countries/other regions seeking assistance to develop and implement national/regional sustainable development programs for coasts and																				
170	10.2.2 Organize and conduct exploratory missions/site visits to non-member countries/regions, in collaboration regional organizations and GEF Implementing Agencies, to scope out existing programs, needs and opportunities for PEMSEA outreach services																				
171	10.2.3 Develop and initiate a PEMSEA outreach service designed to assist potential outreach partners with the planning, development, financing and implementation of SD programs for coasts and oceans																				

SECTION IV: ADDITIONAL INFORMATION

PART I: Other Agreements

CO-FINANCING LETTERS MAY BE FOUND IN ANNEX J

PART II: ORGANIGRAMS OF PEMSEA AND THE PROJECT



PART III: TERMS OF REFERENCE

TERMS OF REFERENCE MAY BE FOUND IN ANNEX K

PART IV: STAKEHOLDER INVOLVEMENT PLAN

REGIONAL AND NATIONAL CONSULTATION PROCESSES RELATED TO PROJECT DEVELOPMENT

175. As this proposed GEF project represents a follow on phase of an existing project, most of the primary stakeholders at regional, national and local levels have been involved in project design activities in the lead up to the preparation of the Project Document. Generally, project design has followed highly participatory and inclusive processes, in line with UNDP and GEF requirements. It should be noted that a number of different and ongoing stakeholder engagement processes have lead to project formulations. This includes consultations related to:

- a. Development of national SDS-SEA implementations plans (which correspond to the overarching regional SDS-SEA)
- b. Development of national level Project Identification Form (PIF), which corresponds with the regional level PIF submitted to GEF-UNDP
- c. Meetings of the East Asian Seas Partnership Council (EAS PC)
- d. Proceedings of the EAS PC Executive Committee,
- e. Proceedings of EAS Ministerial Forums, and
- f. National consultations related to ProDoc formulation, consolidation of outputs, activity design, setting of targets /indicators and identification / validation of priority and replication sites, among other things.

176. Consultations related to development of SDS-SEA implementation involved over 1200 participants (data from China unavailable), while 5 EAS Parnership Council meetings, 12 EAS PC Executive Council meetings, and 4 Minsterial Forums (all between 2003 and 2013), engaged well over 500 participants (some data unavailable). Between January and June 2013, national consultation meetings, workshops and forums undertaken in Cambodia, China, Indonesia, Lao PDR, Philippines, Thailand and Vietnam, engaged over 500 participants, including national and local government officials representatives of research and education institutions, NGOs, corporate and private sector and community-based organizations. These events generally followed a format which encouraged dialogue, feedback and advice from participants on the five main ICM thematic areas, as well as the proposed project outcomes and outputs, using regional and national task force experts to facilitate and guide the proceedings. Proceedings, reports and discussion highlights are available as supporting documentation for all the above-mentioned consultations. **Annex E** provides more detailed information of regional and national stakeholder involvement processes.

APPROACH TO STAKEHOLDER PARTICIPATION

177. The approach to stakeholder involvement and participation has encouraged adherence to a number of guiding principles, which include:

- a. Adding value to project activities
- b. Ensuring accessibility of information to inform decision-making processes
- c. Encouraging adherence to values of transparency, trust, equity, and fairness
- d. Promoting responsiveness to identified needs
- e. Supporting collaborative approaches to project interventions
- f. Developing mechanisms to manage conflicts in the public interest

- g. Being flexible to adapt to changing circumstances, and
- h. Fostering well coordinated and planned implementation.

178. As mentioned in the Stakeholder Analysis, the project will engage with stakeholders at a number of levels:

- a. regional level, including regional intergovernmental organizations, and donor and financing agencies
- b. national level, including national ministries, departments and agencies covering natural resources and environment, agriculture, fisheries, health, education, transportation, energy, tourism, industry, foreign affairs, economic development, and finance, and
- c. local level, including village/township, municipalities, city, district and provincial governments, and their respective national/central government counterparts
- d. corporate sector/business community at all three levels.

STAKEHOLDER INVOLVEMENT PLAN

179. A full Stakeholder Involvement Plan remains to be prepared upon project inception. This will be more specific to the priority sites identified in the Project Strategy section. Tables 24 and 25 below describe the major categories of stakeholders identified, and the level of involvement envisaged in the project.

Table 24. Stakeholders, Roles and Responsibilities

Stakeholder	Roles and Responsibilities
PEMSEA National Focal Points	Primary operational focal points in each participating country will coordinate, facilitate and implement project activities (NFPs are identified in Table 25 below.).
Other National level Ministries, Departments and Agencies (e.g., fisheries, coastal management, pollution control, environmental monitoring, maritime transport and affairs, finance, budget and development planning, etc.)	Serve as the main points of contact for communications, coordination, capacity-building, policy and legislative development and implementation in relation to a) ocean and coastal development policies, b) aligning sectoral line agencies with ICM, and c) mainstreaming ICM with medium term development plans
Provincial Governments	Responsible for provincial administration, legislation and regulation, ICM development planning and implementation. Leveraging participation of constituent districts, cities, municipalities, villages / townships related to site based ICM implementation. Leadership and coordination for knowledge management and scaling up of good practices.
District, city, municipal, village / township level governments	Responsible for coordination of legislation and regulation functions at localized levels. Front line leadership for development and implementation of ICM programs. Sharing of knowledge with provincial and national governments.
PEMSEA Non-Country Partners (including private sector, research institutions, regional intergovernmental bodies, NGOs,	Fill technical and knowledge gaps through research, training, capacity building and other forms of support and technical assistance etc. Facilitate and leverage investments in project activities. Some areas include sustainable fisheries management, sustainable livelihood development, CSR, water

Stakeholder	Roles and Responsibilities
foundations, other project facilities, etc.)	quality monitoring and development of laboratories, etc. May also be responsible for social marketing, community mobilization and policy advocacy.
Convention on Biological Diversity (CBD) National Focal Points	Responsible for endorsement and coordination of activities related to strengthening effectiveness of conservation areas and protection of threatened species at priority project sites
National and sub-national ministries, departments, agencies and bureaus related to fisheries, wildlife, forestry, etc.	Responsible for planning, coordinating and managing the conservation of fauna and flora. Coordinate project activities related to habitat preservation and restoration, sustainable fisheries management and related livelihood development at priority project sites
National and sub-national ministries, departments, agencies and bureaus related to integrated water resources management, waste management, sanitation and health	Responsible for policy development and implementation, planning, coordinating and managing water use and conservation, reducing pollution at priority project sites
National and sub-national ministries, departments, agencies and bureaus related to climate change, disaster risk reduction and management, public works, engineering and infrastructure, port development, management and oversight	Responsible for development and implementation of policies and laws related to climate change mitigation and adaptation, disaster and emergency response, compensation and liability, port development and oil spill response measures. Coordinate project activities related to increasing public and private preparedness and capacity to respond to natural and man-made disasters. Coordinate project activities to mainstream CCA/ DRR with other policies and legislation. Coordinate activities related to capacity-building for ports to achieve PSHEMS recognition
Chambers of commerce, business support organizations, industry associations, women's groups, microfinance institutions, development banks, tour operators	Coordinate and support implementation of project activities related to sustainable livelihoods and eco-enterprise development, formulation of CSR roadmap, enable formation of PPPs, investment opportunities, and engage with PNLG and other stakeholders in the conduct of "blue economy" business forums etc.
Universities, research and academic, scientific and technical institutions	Responsible for project activities that require scientific and technical support, including environmental monitoring, water quality testing, pollutant load monitoring, conduct of ecosystem assessments and valuations, hazards mapping, gender assessments, capacity-building and skills development related to ICM professional certification etc. Involved in packaging of knowledge products which integrate science-based evidence into policy-making processes.
Law enforcement agencies, coast guard, maritime police, armed forces, community-based monitors, metrology departments / organizations and related networks	Responsible for enforcement of marine and coastal laws and regulations. Participate in relevant capacity building activities, including strengthening of disaster response / implementation of early warning systems.
Local target communities and related local project partners	Primary resource users and traditional management of coastal and marine ecosystems. Will be participants in co-management activities, as well as beneficiaries of habitat restoration, sustainable fisheries management, pollution reduction / waster use / conservation, livelihood support, strengthening of resilience to disasters, and other project interventions.

Table 25. PEMSEA National Focal Points

Country	National Focal Point
Brunei Darussalam	Department of Environment, Parks and Recreation Ministry of Development
Cambodia	Ministry of Environment
China	International Cooperation Department State Oceanic Administration
Indonesia	Environmental Degradation Control Ministry of Environment
Japan	Policy Bureau Ministry of Land, Infrastructure, Transport and Tourism
Lao PDR	Department of Water Resources Water Resources and Environment Administration Ministry of Natural Resources and Environment
Malaysia	Department of Environment Ministry of Natural Resources and Environment
Philippines	Department of Environment and Natural Resources
RO Korea	Marine Environment Policy Division Marine Policy Bureau Ministry of Oceans and Fisheries
Singapore	International Policy Division Ministry of the Environment and Water Resources
Thailand	Department of Marine and Coastal Resources Ministry of Natural Resources and Environment
Timor Leste	Ministry of Agriculture and Fisheries (MAF)
Vietnam	Vietnam Administration of Seas and Islands

LONG-TERM STAKEHOLDER PARTICIPATION

180. The project will provide the following opportunities for long-term participation of all stakeholders, with a special emphasis on the active participation of local communities and institutions, and enhancement of inter-agency, inter-sectoral coordination of ICM programs

- a. Decision-making – through the EAS Partnership Council. The Council has established protocols and procedures and follows a participatory and transparent process involving the confirmation of all key project stakeholders; managing key stakeholder relationships, conducting consultations with all stakeholders as required; providing guidance and oversight to the Project Management.
- b. Capacity building – at systemic, institutional and individual level – is one of the key strategic interventions of the project and will target all stakeholders that have the potential to be involved in implementing and/or monitoring management agreements related to activities in and around the ICM priority sites. The project will target especially organizations operating at the community level to enable them to actively participate in developing and implementing activities.
- c. Knowledge management - will include the participatory development of an integrated knowledge management strategy, which will emphasize “communities of practice”, outreach services, dissemination of information on good practices and lessons learned on as wide a scale as possible. Moreover, the project will create an enabling platform for multi-layered stakeholder participation through establishment of interoperable information systems, adding value to existing portals such as IW Learn, and institutionalizing participation through a range of networks,

partnerships, twinning arrangements, exhibitions, and the Ministerial Forums and EAS Congress. The project's design incorporates these and other features to ensure on-going and effective stakeholder participation in the scaling up of SDS-SEA implementation.

COORDINATION WITH RELATED INITIATIVES

181. The project will also build on, complement and collaborate with a number of other GEF-supported initiatives in the region. Table 26 below shows the nature of the proposed coordination.

Table 26. Coordination with Other GEF-supported Initiatives in EAS Region

Project / Initiative	Potential Collaboration / Coordination
Yellow Sea LME Project	<ul style="list-style-type: none"> • Establish formal agreement with YSLME Commission • Contribute to SDS-SEA overarching framework • Integrating EAFM with ICM, with emphasis on habitat restoration, pollution reduction and water use /conservation
Sustainable Management of Highly Migratory Fish Stocks in EAS Region	<ul style="list-style-type: none"> • Establish formal agreement with WCPFC • Contribute to SDS-SEA overarching framework • Integrating EAFM with ICM, with emphasis on sharing of benefits from shared resources in Philippines, Vietnam and Indonesia – and compliance with international convention
CTI Arafura and Timor Seas Ecosystems Action Programme	<ul style="list-style-type: none"> • Integrating EAFM with ICM, including livelihoods development in Timor Leste and parts of Indonesia
CTI Coastal and Marine Resources Management in the Coral Triangle	<ul style="list-style-type: none"> • Integrating biodiversity conservation Areas with ICM, with emphasis on improving effectiveness of MPAs and MPA networks, in Indonesia, Malaysia and Philippines
Coral Reef Rehabilitation and Management Project Phase II (COREMAP III)	<ul style="list-style-type: none"> • Integrating biodiversity conservation with ICM, with emphasis on MPAs / MPA networks, habitat restoration, fisheries development / management and livelihoods in Indonesia
Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand	<ul style="list-style-type: none"> • Possible joint participation on Project Steering Committees • Coordination / collaboration on habitat restoration and management; disaster risk reduction in coastal areas; reducing land based sources of pollution etc • Inclusion in selected knowledge management initiatives related to influencing policy adoption / implementation, increasing investments and sharing of information on good practices
Establishment and Operation of a Regional System of Fisheries Refugia in South China Sea and Gulf of Thailand (GEF id 5401)	<ul style="list-style-type: none"> • Integrating EAFM with ICM, including livelihoods development • Inclusion in selected knowledge management initiatives related to influencing policy adoption / implementation, increasing investments and sharing of information on good practices
Integrated Coastal Resources Management Project (Philippines)	<ul style="list-style-type: none"> • Integrating biodiversity conservation with ICM, with emphasis on habitat restoration and preservation, policy and governance, monitoring and evaluation in Philippines
Capturing Coral Reef and Related Ecosystems Services (CCRRES) Project	<ul style="list-style-type: none"> • Potential partner to build capacity / conduct of valuation studies to determine economic values of ecosystem

Project / Initiative	Potential Collaboration / Coordination
	services in selected priority ICM sites
WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia (China, Vietnam, Philippines)	<ul style="list-style-type: none"> • Joint access to knowledge networks / platforms, sharing of scientific and technical data and information on good practices • Continued leveraging of investments in new project opportunities
Marine Electronic Highway Demonstration Project (Straits of Malacca)	<ul style="list-style-type: none"> • Sharing of information and knowledge related to environmental monitoring, oil spill preparedness and response
Bay of Bengal LME Project	<ul style="list-style-type: none"> • Sharing of information and knowledge related to EAFM and sustainable livelihoods in selected areas of Indonesia • Possible outreach services to other Bay of Bengal countries
Biodiversity Management in Coastal Areas of China's South Sea (completed)	<ul style="list-style-type: none"> • Sharing of knowledge on good practices in habitat restoration, protection and management, effective management of marine protected areas
Strengthening the Management Effectiveness of the Wetland Protected Area System in Hainan for Conservation of Globally Significant Biodiversity	<ul style="list-style-type: none"> • Sharing of knowledge and information on good practices in effective management of conservation areas, and sustainable financing mechanisms
Enhancing the Protected Area System in Sulawesi (E-PASS) for Biodiversity Conservation	<ul style="list-style-type: none"> • Sharing of information and good practices on habitat restoration, protecting threatened species, ecosystem valuation and sustainable financing mechanisms
Strengthening the Marine Protected Area System to Conserve Marine Key Biodiversity Areas (Philippines)	<ul style="list-style-type: none"> • Sharing of information and best practices on increasing management effectiveness of marine protected areas, ecosystem valuation and sustainable financing mechanisms
Catalyzing Sustainability of Thailand's Protected Area System	<ul style="list-style-type: none"> • Sharing information on ecosystem valuation, sustainable financing of marine protected areas
Developing National Biodiversity Strategy and Action Plan and Mainstreaming Biodiversity Conservation into Provincial Planning (Vietnam)	<ul style="list-style-type: none"> • Sharing best practices and information on mainstreaming of priority policy concerns into local and national development planning