

Implementing the Strategic Action Programme for THE SOUTH CHINA SEA AND GULF OF THAILAND (SCS SAP) Project

> INCEPTION PHASE REGIONAL IMPLEMENTATION REPORT

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ACRONYMS AND ABBREVIATIONS

APEC	Asia-Pacific Economic Council	
APEC-MRCWG	APEC-Marine Resource Conservation Working Group	
ASEAN	Association of South East Asian Nations	
ASEAN+1	ASEAN-China Strategic Partnership	
ASEAN+3	ASEAN plus China, Republic of Korea and Japan	
CIDA	Canadian International Development Agency	
CITES	Convention on Trade in Endangered Species	
COBSEA	Co-ordinating Body on the Seas of East Asia	
DENR	Department of Natural Resources and Environment (of the	
	Government of Philippines)	
EU	European Union	
FAO	Food and Agriculture Organization (of the United Nations)	
GEF	Global Environment Facility	
GIS	Geographical Information System	
GOOS	Global Ocean Observing System	
GPA/LBA	Global Programme of Action for the Protection of the Marine	
	Environment from Land-based Pollution	
ICM	Integrated Coastal Management	
IMC	Inter-Ministry Committee	
IMO	International Maritime Organisation	
IOC WESTPAC	Intergovernmental Oceanographic Commission Sub-commission	
	for the Western Pacific	
IUCN	International Union for the Conservation of Nature	
IW	GEF International Waters Focal Area	
IW:LEARN	International Waters Learning, Exchange and Resource Network	
LME	Large Marine Ecosystem	
MPA	Marine Protected Area	
MoA	Memorandum of Agreement	
MoU	Memorandum of Understanding	
M&E	Monitoring and Evaluation	
NAP	National Action Plans (developed in support of the SAP)	
NBSAP	National Biodiversity Strategic Action Plans	
NGO	Non-Governmental Organisation	
NTFP	National Technical Focal Point	
NTWG	National Technical Working Group	
NWG-L	National Working Groups on Legal Matters (of the SCS SAP	
	project)	
PCU	Project Co-ordinating Unit (of the SCS project)	
PEMSEA	Partnership for Environmental Management in the Seas of East	
	Asia	
PoW	Programme of Work	
PSC	Project Steering Committee (of the SCS SAP project)	
RSTC	Regional Scientific and Technical Committee	
RTF-L	Regional Task Force on Legal Matters	
RTF-E	Regional Task Force on Economic Valuation	
RWG-CR	Regional Working Group on Coral Reefs	
RWG-M	Regional Working Group on Mangroves	
RWG-SG	Regional Working Group on Seagrass	

RWG-W	Regional Working Group on Wetlands	
RWG-LbP	Regional Working Group on Land-based Pollution	
SAP	Strategic Action Programme for the South China Sea	
SCS	South China Sea	
SCS Project	UNEP/GEF project entitled "Reversing Environmental	
U U	Degradation Trends in the South China Sea"	
SDGs	Sustainable Development Goals	
SEA	Specialized Executing Agency	
SEAFDEC	Southeast Asian Fisheries Development Center	
SGP	Small Grants Programme of the GEF	
SMART	Specific, Measurable, Achievable and Attributable, Relevant and	
	Realistic, Time-bound, Timely, Trackable and Targeted Indicators	
TDA	Transboundary Diagnostic Analysis	

1. PROJECT OVERVIEW

1.1 INTRODUCTION

1. The South China Sea is a semi-enclosed sea, which supports a number of unique habitats and ecosystems that are amongst the most biologically diverse shallow water marine ecosystems globally. The richness and productivity of the South China Sea and associated environments are, however, seriously threatened by high population growth, pollution, overharvest and habitat modification, resulting in high rates of habitat loss and impairment of the regenerative capacities of living resources. The socio-economic impacts of environmental deterioration are significant for the economies of this region.

2. Recognising that actions were urgently needed to halt degradation of the environment of this marine basin, the countries of the region sought the assistance of UNEP and the Global Environment Facility (GEF) and the project "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" was implemented from 2003-2008. This included a Transboundary Diagnostic Analysis of the issues and problems and their societal root causes as the basis for development of a Strategic Action Programme (SAP) which was inter-governmentally adopted in 2008. The SAP established a series of objectives and priority costed actions for coastal habitats, land-based pollution management, and the over-exploitation of fish stocks in the South China Sea.

3. This purpose of this report, prepared during the Inception Phase of the "*Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand*" (hereafter named SCS-SAP project) is to further elaborate the activities execution arrangements of the project, based on the UNEP project document adopted by the GEF Secretariat 2 November 2016 (GEF ID 5538¹) and consultations with executing agencies, partners and participating countries.

Cambodia, China, Indonesia, Philippines, Thailand and Viet Nam
United Nations Environment Programme (UNEP)
United Nations Office for Project Services (UNOPS) and the Southeast Asian Fisheries Development Center (SEAFDEC)
15 million USD (with approximately 83 million USD in co-financing)
2018-2024
https://scssap.org

¹ See <u>https://www.thegef.org/project/implementing-strategic-action-programme-south-china-sea</u>

Figure 1 South China Sea and Gulf of Thailand, from original project and SAP, to current implementation

UNEP/GEF Project entitled "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand (SCS)" 2002 – 2008

Participating Countries: Cambodia, China, Indonesia, Malaysia, Philippines, Thailand, Vietnam

> <u>Focal Ministries:</u> Ministries of Environment

22 Government Departments, 20 Universities and Research Institutes, and 2 NGOs Engaged as Specialized Executing Agencies

In excess of 400 Institutions involved in project activities both directly and indirectly

KEY OUTPUTs:

Strategic Action Programme for the South China Sea (2008)

National Action Plans Demonstration sites Technical publications

http://www.unepscs.org/

UNEP/GEF Project entitled "Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand" 2020

Participating Countries: Cambodia, China, Indonesia, Philippines, Thailand, Vietnam

https://scssap.org/

Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand 2018 - ongoing

Participating Countries: Cambodia, Indonesia, Philippines, Thailand, Vietnam

https://fisheries-refugia.org/

SAP Implementation Medium Sized Projects (MSPs)

Demonstration of Sustainable Management of Coral Reef Resources in the Coastal Waters of Ninh Hai District, Ninh Thuan Province, Viet Nam (GEF ID. 3187) 2010-2014

Demonstration of Community-based Management of Seagrass Habitats in Trikora Beach, East Bintan, Riau Archipelago Province, Indonesia (GEF Project ID 3188) 2007-2010

Participatory Planning and Implementation in the Management of Shantou Intertidal Wetland, China (GF/3309) 2009-2012

2. PROJECT DEFINITION

2.1 GOALS AND OBJECTIVES

4. The SCS-SAP Project Objective is "To assist countries in meeting the targets of the approved Strategic Action Programme (SAP) for the marine and coastal environment of the South China Sea (SCS) through implementation of the National Action Plans in support of the SAP, and strengthening regional co-ordination for SCS SAP implementation"

5. The medium-term objective of the project is to assist the governments of the participating countries in meeting the targets of the approved Strategic Action Programme through the provision of technical assistance as required in implementing national activities in support of the SAP; and the provision of strong regional co-ordination of the process of SAP implementation.

- 6. The three components of the project correspond each to three main objectives:
 - Component 1. Reducing habitat degradation and loss via national and local reforms to achieve Strategic Action Programme targets for coastal habitat management in the South China Sea;
 - Component 2. Strengthening knowledge-based action planning for the management of coastal habitats and land-based pollution to reduce environmental degradation of the South China Sea; and
 - Component 3. Facilitating regional and national level integration and cooperation for implementation of the South China Sea Strategic Action Programme

2.2 THEORY OF CHANGE

7. The Indo-West Pacific marine biogeographic province has long been recognized as the global centre of marine tropical biodiversity. Compared to the Atlantic, the tropical Indo- West Pacific is highly diverse. Like most tropical coastlines worldwide, the dominant coastal ecosystems of the South China Sea marine basin are mangroves, coral reefs and seagrass meadows. Significant other coastal ecosystems include coastal lagoons, a common coastal landform in Viet Nam, and extensive inter-tidal unvegetated mudflats that are found in many places around the South China Sea (UNEP, 2008d). Socio-economically, culturally and aesthetically, the South China Sea, the Gulf of Thailand and regional river basins and bays form part of the common heritage of the people of the Southeast Asian region. The region's expanding population relies on the SCS for nutrition, recreation and economic pursuits (e.g., tourism), energy (e.g., oil and gas), aquaculture, pharmaceuticals, the ornamental fish trade, construction materials and ports and shipping. The SCS region is ecologically at risk. Reversing this requires regional cooperation for long-term sustainability and regional growth.

8. The Problem Tree for the SCS-SAP Project is summarized in **Figure 2** and resulting Theory of Change in **Figure 3**, based on the finding of the SAP and technical publications.

Figure 2 Problem Tree for the South China Sea and Gulf of Thailand.



Figure 3. Theory of Change for the South China Sea and Gulf of Thailand.

OUTPUTS

- Mangroves. Declaration of mangrove as National Parks and Protected Areas; plans for management, Reform of laws and regulations, Replanting; mangrove forest via enrichment planting; mechanism for monitoring management, ecolopical and socioeconomic indicators at 26 sites
- ✓ Coral reefs. Management capacity at selected sites; management approaches, tools and established mechanisms for monitoring at 82 sites
 ✓ Seagrasses. 21e seagrass areas under sustainable management with supporting
- Seagrasses. 21e seagrass areas under sustainable management with supporting laws and regulations; 7 MPA
 Coastal wetlands. Integrated management plans (3 lagoons 9 estuaries 5 tidal)
- Constativections. Integrated management plans to lagoons y estuaries, s tota flats, 1 peets wamp and 1 non-peets wamp, associated policy. Jegal & institutional reforms; declaration of wetlands with protective status (i.e. nonhunting area, nature reserves, protected areas, Ramsar Sites); monitoring scheme
- ✓ National Committees and Regional networks established; SAP monitoring and evaluation; networked community leaders and governments
- Enhanced information on habitats: remote sensing data; support to monitoring mechanism; assess role of habitats in climate adaption and carbon sequestration; assess impacts of climate change; assess data gaps and innovative approaches to monitoring
- Integration of science to management for pollution: updating nutrient carrying capacity model for the SCS; assess key contaminants; quantify contaminants from aquaculture;
- Strengthened national policies and laws: national best-practices documented, review of legislative and institutional frameworks; revised national/provincial policies and supporting regulations for land-based pollution and habitats
- Updated Total Economic Values: Expanded datasets and estimates of economic valuation information on the goods and services of SCS coastal habitat; compilation of good examples in blue and circular economy;
- V Tools and mechanisms for sustainable management: standards and criteria for defining the sustainability of coastal habitat management systems; national standard Operating Procedures for land-based pollution control; Online catalogue of best practices; training and capacity building of government officials; community leaders; and managers;
- Updated TDA and SAP: consensus on problems and issues and updating TDA; Coastal habitats report; updated SAP; prioritized management actions; updated nationalaction plans (NAPs)
- Regional and sub-regional co-operation for science-policy: policy science coordination; regional scientific conferences; Mayors Round Table meeting and exchange of best-practices; joint management on 2 transboundary water areas; cooperation with GEF fisheries refugia; award program on best practices;
- Small Grants Program (SGP) and CSOs: Cooperation with SGP; training on science and management; 20 community based projects implemented;
 Government-Private Sector engagement: review and case studies of past
- public-private partnerships, new opportunities defined; Public-private partnerships and investment plan; two partnership forums; Adopted National Investment Plans; Regional financial mechanism developed and adopted; Information and Communication Strategy implemented: multi-media
- Information and non-vectors are tracked information information and knowledge products, knowledge tools to support decisionmaking and planning, SCS project web portal and clearing house mechanism; IWLEARN IW Conferences and experience notes; online public awareness centre;
- Ensuring Long term and sustainable regional coorperation: Biannual meetings of the Regional TaskForce on Legal Matters; National Working Groups established; proposal on instrument for long-termSAP implementation and regional coordination and its adoption.

OUTCOMES

- 1. Reducing habitat degradation and loss via national and local reforms to achieve Strategic Action Programme targets for coastal habitat management in the South China Sea
- 1.1 Appropriate forms of sustainable management established for 860,000 ha of mangrove

1.2 153,000 ha of coral reef at 82 priority sites managed sustainably including a reduction in the decadal rate of degradation in live coral cover from 16 to

- 1.3 Conservation, management and sustainable use of 25,900 ha of known seagrassarea in the South China Sea
- 1.4 Integrated management of 783,900 ha of coastal wetland at 19 sites, including habitat restoration and protection strengthened at priority locations 1.5 National and regional level cooperation in tracking results of SAP actions for coastal habitat management

2. Strengthening knowledge-based action planning for the management of coastal habitats and land-based pollution to

- reduce environmental degradation of the South China Sea
- 2.1 Enhanced information-base for coastal habitat management, monitoring and action planning
- 2.2 Effective integration of regionalscience in the management of land-based pollution
- 2.3 Strengthened and harmonized national policies and laws, and supporting financial mechanism, for the management of habitats and land-based sources of pollution
- 2.4 Updated Total Economic Values of coastal habitats for use in development planning and decision-making and blue economy
- S. S. Regionally appropriate tools and mechanisms to guide the development of sustainable management systems for coastal habitats and land-based
- pollution 2.6 Updated and Ministerially adopted Transboundary Diagnostic Analysis and Strategic Action Programme, including prioritization of national management

3. Facilitating regional and national level integration and cooperation for implementation of the South China Sea

Strategic Action Programme 3.1 Regional and sub-regional co-operation in the integration of scientific

actions to address climate variability and change

- knowledge and research outputs with management and policymaking
 3.2 Capacity for civil society and community organization participation in SAP
- implementation strengthened via operational partnership with GEF SGP
 3.3 Relationships between central and local governments and the private sector strengthened and formalized
- 3.4 Revitalization of regional mechanisms for communications, knowledge exchange, and information and data management and sharing
- S.5 Agreed arrangements for strengthened regional cooperation in the management of the marine and coastal environment of the South China Sea

INTERMEDIATE STATE

Sustainable land-use practices and management implemented and reduction of destructive practices to priority mangroves, coral reefs, seagrass and wetlands (i.e. conversion to pond aquaculture, mangrove felling for domestic use, conversion for development etc.) and establishment protected areas for mangroves, coral reefs, seagrasses and wetlands, including capacity for sustainable management and financing

Strengthening knowledge-based action planning for the management of coastal habitats and land-based pollution, through assessments, use of remote sensing, modelling and economic evaluations as a basis for governments to implement measures and resources in national planning

Establishment of a coordinated monitoring and reporting mechanisms of habitats and pollution, based on in-situ data, national reports, cooperation with other regional partners, identification of innovative approaches to monitoring data poor areas, and providing a solid foundation for a revised TDA

Revised measurable targets and indicators adopted based on status of the SAP implementation, successes and challenges, towards an updated SAP for the future coordinated protection of the SCS, in alignment and support with global MEA targets and commitments, such as the SDGs

Coordinated network of national and regional level committees and expert groups coordinating governments, civil society, NGO's for long-term SAP implementation, including private-public partnerships and financial strategy

Knowledge, data, best practices and guidelines exchanged and made widely available

IMPACTS

Restored mangrove, coral reef, seagrass and wetland habitats, with a corresponding increase in marine biodiversity and species Increase in effectively managed MPAs and protected areas. Contribution to SDG 14.2, 15.1, 15.5

Risk of poverty to local communities and vulnerability to climaterelated extreme events and other economic, social and environmental shocks and disasters reduced (SDG 1.5)

Income generating potential and employment from fisheries and tourism maintained through sustainable management and financing measures Contribution to SDG 14.4, 8.3, 8.4, 8.9, 12.2 and 12.4

Contribution to 3DG 14.4, 8.5, 8.4, 8.5, 12.2 and 12.4

Reduced vulnerability of coastal communities to climate change impacts due to degraded coastal ecosystems Contribution to SDG 13.1, 13.2, 13.3

Enhanced planning to reduce human health risks from polluted water and high levels of faceal coliforms, heavy metals and organics including and spread of disease and parasitic infestation Contribution to SDG 14.1, 6.3, 6.6 and 3.9

Key impact drivers

- Commitment is secured from the region to tackle challenges and to improve the conditions of the communities living in this region and the ecosystem
- Transboundary cooperation frameworks are strengthened and
- stakeholders and capacitated to implement the SAP

Key assumptions

- Financing sufficient and commitment from stakeholders to
 execute site specific habitat interventions
- Interministerial Committees members empowered to ensure agreed actions and reforms are implemented

2.4 PROJECT OUTCOMES AND REVISED OUTPUTS

9. During the Inception Phase of the SCS-SAP Project, the project outcomes and outputs were reviewed with the aim to ensure clear flow of activities and also to ensure outputs would maximize support to SAP implementation whilst also taking into consideration more recent global and regional processes and initiatives, such as the Sustainable Development Goals, Convention on Biological Diversity and Aichi Targets, Blue and Circular Economy. **Table 1** presents the outcomes and outputs of the project. Proposed minor revisions from the project document endorsed by the GEF are highlighted in red.

10.

OUTCOMES	Revised Outputs (changes in red)	Rationale for change (if any)	
Component 1. Reducing habitat degradation and loss via national and local reforms to achieve Strategic Action Programme targets for coastal habitat management in the South China Sea			
Outcome 1.1 Appropriate forms of sustainable	1.1.1 Declaration of 57,400 ha of mangrove as National Parks and Protected Areas	No change	
	1.1.2 Designation and plans for the management of 166,600 ha of mangrove as non-conversion, sustainable use areas	No change	
	1.1.3 Reform of laws and regulations for the sustainable use of 602,800 ha of mangrove forest	No change	
management	1.1.4 Replanting of 21,000 ha of deforested mangrove land	No change	
established for 860,000 ha of mangrove	1.1.5 Biodiversity increased for 11,200 ha of mangrove forest via enrichment planting	No change	
mungrove	1.1.6 Established mechanism for monitoring management, ecological and socio-economic indicators at 26 sites [based on SAP results framework]	So as to be in line with similar output under 1.2 and 1.3 below. Overall coordinate with monitoring program for the region	
Outcome 1.2 153,000 110,430 ha of coral reef at 82 46 priority sites managed sustainably , including a reduction in the decadal rate of degradation in live coral cover from 16 to 5%	1.2.1 Management capacity (number/levels human resources, facilities and equipment, and sustainable financing mechanisms) built for 82 46 coral reef sites	Project document included sites in Malaysia which is not participating.	
	1.2.2 Management approaches and policy, legal & institutional reforms (integrated, community-based, multiple use) improved at 82 46 coral reef sites	Project document included sites in Malaysia which is not participating	
	1.2.3 Management tools (licensing and permit systems, seasonal closures, zoning) developed and utilized to address key threats at priority sites	No change	
	1.2.4 Established mechanism for monitoring management, ecological and socio-economic indicators at 82 46 sites [based on SAP results framework]	Project document included sites in Malaysia which is not participating	
Outcome 1.3 Conservation, management and sustainable use of 25,900 15,848 ha of known seagrass area in the South China Sea	1.3.1 Twenty-one seagrass areas totaling 25,900 15,848 ha under sustainable management with supporting laws and regulations	Project document included sites in Malaysia which is not participating	
	1.3.2 Amended management plans for 7 existing MPAs with significant seagrass areas, to include specific seagrass-related management actions and policy, legal & institutional reforms	Minor edit	
	1.3.3 Designation of 7 new Marine Protected Areas focusing on seagrass areas identified in the prioritized listings of the SCS Project	No change	
	1.3.4 Established mechanism for monitoring management, ecological and socio-economic indicators at 20 sites [based on SAP results framework]	No change	

 Table 1. Revised Project Outcomes and Outputs (revisions in red)

OUTCOMES	Revised Outputs (changes in red)	Rationale for change (if any)
Outcome 1.4 Integrated management of 783,900 ha of coastal wetland at 19 sites, including habitat restoration and protection strengthened at priority locations	1.4.1 Integrated management plans developed and under implementation for at least 3 lagoons 9 estuaries, 5 tidal flats, 1 peat swamp and 1 non-peat swamp and associated policy, legal & institutional reforms	Minor edit
	1.4.2 Declaration of at least 7 wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites).	No change
	1.4.3 Adoption of a regional estuary monitoring scheme and its national implementation [based on SAP results framework]	No change
Outcome 1.5 National and regional level cooperation in tracking results of SAP actions for coastal habitat management	1.5.1 National committees and regional networks of habitat specialists established under the SCS project revitalized and functioning	No change
	1.5.2 Mechanism to monitor and evaluate the impacts of SAP implementation and achievement of habitat targets operational [including agreement on standardized methods and guidelines for inventory and assessment]	No change
	1.5.3 Community leaders and local government from priority habitat sites networked via national and regional round-table meetings to foster cooperation and knowledge sharing on achievements and best practices	No change
	1.5.4 Biennial state of coastal habitat reports published 1.5.4 Progress and status report of regional and national SAP implementation	Publication is needed on SAP implementation so far as baseline for next TDA and SAP. 1.5.4 has been moved to 2.6.2
Component 2. Stren	gthening knowledge-based action planning for the managen	nent of coastal habitats and land-based
pollution to reduce e	environmental degradation of the South China Sea	
Outcome 2.1 Enhanced information-base for coastal habitat management, monitoring and action planning	 2.1.1 Algorithms for the interpretation of remotely sensed information and data on coastal habitat associations and zonation developed and applied 2.1.1. Validation of existing or improved algorithms with on-site data 	Reformulation of text
	2.1.2 Mechanism for collection and exchange of regional coastal habitat and pollution information and data established	Minor edit
	2.1.3 Role of coastal habitats of the South China Sea in climate change adaptation and the sequestration and storage of carbon	Minor edit to include adaptation
	2.1.4 Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats of the South China Sea	Minor edit to include ocean acidification
	2.1.5. Review of current status of habitat and pollution data available in the SCS, gaps and challenges and innovative technology and approaches to monitoring and assessments that can support SCS monitoring programme	There is a need for a baseline report of new approaches to monitoring
	2.1.6 A regional system for periodic monitoring of the state of coastal habitats of the South China Sea	
	2.1.6 Updated and adopted National Action Plans for mangroves, coral reefs, seagrass and wetlands, including enactment of supporting legislation where required	Moved to 2.6. National Actions Plans included in 2.6 with TDA and SAP
Outcome 2.2 Effective integration of regional science in the management of	 2.2.1 Nutrient carrying capacity model for the SCS marine basin used to communicate with decision makers about the localized v. transboundary impacts of land-based pollution in the SCS 2.2.1 Updating the nutrient carrying capacity model for the SCS marine basin and integration into SCS GIS 	Minor edit Discuss importance of updated or new model for SCS essential

OUTCOMES	Revised Outputs (changes in red)	Rationale for change (if any)
land-based pollution	2.2.2 Total contaminant loading and carrying capacity of the SCS estimated via application of quantitative modeling and GIS-based techniques for seven heavy metals (Hg, Cd, Pb, Cu, Cr, As, Zn).	
	2.2.3 Impacts of estimated heavy metal contaminant loadings defined, quantified and communicated to decision- makers 2.2.4 Characterization of heavy metal pollution hotspots 2.2.2. Regional level assessment of impacts of key	Suggested to merge outputs and prepare concrete repots and recommendations
	contaminants (nutrients, heavy metals, oil, litter) and national or local assessments based on NAP and hotspots	
	2.1.3. Quantification of effluent volumes and contaminant loadings from coastal aquaculture to the SCS marine basin	No change
0	2.3.1. National best practices in waste water management, law enforcement, and community and industry participation in managing land-based sources of pollution and habitat management documented and shared	Minor edit
Strengthened and harmonized national policies	2.3.2 Review of legislative and institutional frameworks for land-based pollution and habitat management in participating countries	Minor edit
and laws, and supporting financial mechanism, for the management of	2.3.3 Harmonized national Standard Operating Procedures for land-based pollution control and management [including agreed sediment, biota, & water quality criteria]	No change
habitats and land- based sources of	2.3.4. Revised national/provincial policies and supporting regulations for land-based pollution and habitats developed, enacted and implemented	Minor edit
	2.3.5 Updated and adopted National Investment Plans for land-based pollution management in the SCS [Yr 5]	Moved to 3.3 as linked to TDA-SAP update
	2.3.6 Regional financial mechanism for land based pollution management [Yr 5]	Moved to 3.3 as linked to TDA-SAP update
Outcome 2.4 Improved national and regional values for the Updated Total Economic Values of coastal habitats for use in development planning and decision-making and blue economy	 2.4.1 Expanded datasets of economic valuation information on the goods and services of SCS coastal habitats 2.4.2 Estimates of the value for the service provided by coastal habitats as nursery areas for offshore fish and crustaceans 	
	 2.4.3 Estimates of economic losses of coastal ecosystem goods and services consequent upon coastal shipping accidents and pollution damage 2.4.4 Updated estimates of Total Economic Values for coastal habitats of the SCS and converted to 2017 value by means of the consumer price index 	Suggestion to merge activities To discuss whether methodology of economic valuation used is still valid or newer approaches should be used
	2.4.1 Expanded datasets and estimates of economic valuation information on the goods and services of SCS coastal habitats	
	2.4.2. Compilation of good examples, and identify recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management	Blue and circular economy an essential aspect to be integrated in SAP implementation
Outcome 2.5 Regionally appropriate tools and mechanisms to guide the development of sustainable management	2.5.1. Regionally applicable standards and criteria for defining the sustainability of coastal habitat management systems, including documented models of sustainable use.	Focus to given to align SAP monitoring, reporting, TDA and SAP with regional and global commitments and indicators (i.e. SDG's) and is merged in outcomes 2.1 and 2.6
	2.5.1. Online catalogue of best practice management measures and technologies for sustainable use of SCS coastal habitats and land-based pollution management	No change

OUTCOMES	Revised Outputs (changes in red)	Rationale for change (if any)
systems for coastal habitats and land- based pollution	2.5.2 Government officials, community leaders, and habitat and pollution managers exposed to on-going practices in rehabilitation, management, and pollution control and treatment via programme of training, study tours and exchange	No change
	2.6.1 National and regional level consensus on contemporary issues and problems and updated TDA	TDA was missing
Outcome 2.6 Updated and Ministerially adopted Transboundary Diagnostic Analysis and Strategic Action Programme, including prioritization of national management actions to address climate variability and change	 2.6.2 The immediate and ultimate root causes of the problems identified and consensus reached on priorities for intervention, including comparative analysis of the net benefits of alternative options (Yr 3) 2.6.2. SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD) 	Moved from 1.5.4.
	2.6.3 National and regional consultative process to develop updated Strategic Action Programme SAP for adoption at the Ministerial level including agreed monitoring and reporting mechanisms	Current SAP has not been monitored. Need a long-term monitoring and reporting mechanism
	2.6.4 Prioritization of national management actions to address climate variability and change for incorporation into national policies and plans, in particular for climate variability and change and blue economy	Climate change and blue economy elements to be integrated
	2.6.5 Updated and adopted National Action Plans for mangroves, coral reefs, seagrass and wetlands, and land- based pollution including enactment of supporting legislation where required	Minor edit
Component 3. Facilitating regional and national level integration and cooperation for implementation of the South China Sea Strategic Action Programme		
	3.1.1 Regional Scientific and Technical Committee of the SCS project functioning as a bridge between the scientific community and decision-makers [annual meetings]	No change
Outcome 3.1 Regional and sub-	3.1.2 Knowledge exchanges between government and scientific community through biennial-Regional Scientific Conferences	No change
operation in the integration of scientific	3.1.3 Best practice exchanges between local government officials and coastal managers on science-based management via annual Mayor's Round-Table meetings	No change
knowledge and research outputs	3.1.4 Memoranda of Agreement for joint management of 2 priority transboundary water areas agreed & implemented	No change
and policy making	3.1.5 Cooperation with the GEF fisheries refugia project and other relevant regional initiatives established	No change
	3.1.6 Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry [annual]	No change
Outcome 3.2 Capacity for civil society and community organization participation in SAP implementation strengthened via operational partnership with GEF SGP	3.2.1 Cooperation with GEF SGP in the commissioning and implementation of an additional 12 community-based projects for SAP implementation	No change
	3.2.2 CSO & CO inputs elicited for planning and M&E of the SCS-SGP partnership via annual NGO forums	No change
	3.2.3 Training program on science and management of SCS coastal habitats and resources for SGP proponents	No change
Outcome 3.3 Relationships between central and	3.3.1 Review of past and ongoing public-private partnerships for coastal management in SCS region and case studies for effective private sector engagement	Minor edit to include case studies

OUTCOMES	Revised Outputs (changes in red)	Rationale for change (if any)
local governments and the private sector strengthened and formalized	3.3.2 Identification of opportunities for private sector investment (e.g. oil and gas, fisheries, tourism) in implementation of the updated SAP	No change
	3.3.3 Public-private partnerships and investment plan for the implementation of the updated SAP solidified through two partnership forums to facilitate	No change
	3.3.4. Updated and adopted National Investment Plans for land-based pollution and habitat management in the SCS [Yr 5]	Moved from 2.3.5
	3.3.5. Regional financial mechanism for land-based pollution and habitat management [Yr 5]	Moved from 2.3.6
Outcome 3.4 Revitalization of regional mechanisms for communications, knowledge exchange, and information and data management and sharing	3.4.1 A variety of multi-media information and knowledge products based on SCS SAP implementation communications strategy	No change
	3.4.2 Regionally appropriate knowledge tools developed to support decision-making and planning.	No change
	3.4.3 The SCS project web portal and clearing house mechanism <www.unepses.org>-and associated regional databases online, updated and linked to IW-Learn and other GEF Knowledge management systems</www.unepses.org>	Minor edit as original web-site outdated
	3.4.4 Active engagement with GEF IW:LEARN [1% of project resources] including participation in IW conferences and 3 experience notes	No change
Outcome 3.5	3.5.1 Biannual meetings of the Regional Task Force on Legal Matters.	No change
Agreed arrangements for	3.5.2 National Working Groups established and functional.	No change
strengthened regional cooperation in the management of the marine and coastal environment of the South China Sea	3.5.3 Process for development of a proposed arrangement for regional cooperation defined and planned	No change
	3.5.4 National stakeholder inputs to drafting of instrument for strengthened regional cooperation facilitated via national consultations	No change
	3.5.5 Adopted instrument for strengthened regional cooperation	No change

2.5 STRATEGIC ALIGNMENT

Agenda 2030 and Sustainable Development Goals

11. On 1 January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development (UNEP, 2015)— adopted by world leaders in September 2015 at an historic UN Summit — officially came into force. While the SDGs are not legally binding, governments are expected to take ownership and establish national frameworks for the achievement of the 17 Goals and 169 targets. Countries have the primary responsibility for follow-up and review of the progress made in implementing the Goals, which will require quality, accessible and timely data collection.

Figure 4. The 17 Sustainable Development Goals



12. A number of SDG Goals and targets, in particular Goal 14. Life below water related to pollution (target 14.1), marine and coastal ecosystems (target 14.2), marine protected areas (target 14.5); as well as numerous other targets are relevant to the South China Sea Region. A regional approach to the implementation and reporting of the SDG's is regarded as essential especially for targets which are more transboundary in nature and especially considering that in voluntary national reviews the least reported are related to environment and nature, such as life below water (SDG 14), climate action (SDG 13), life on land (SDG 15), responsible consumption and production (SDG 12) as well as partnership for the goals (SDG 17).

SDG Goal	Main relevant targets to the South China Sea							
Component 1. Reducing habitat degradation and loss via national and local reforms to achieve Strategic Action Programme targets for coastal habitat management in the South China Sea								
Goal 14. Life below Water	 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their 							

 Table 2. Main relevant targets to the South China Sea

SDG Goal	Main relevant targets to the South China Sea
SDG Goal Goal 15. Life on Land	 Main relevant targets to the South China Sea resilience, and take action for their restoration in order to achieve healthy and productive oceans; 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics; 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information; 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species 15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty, reduction strategies, and
	 local planning, development processes, poverty reduction strategies and accounts 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
Goal 12. Responsible Consumption and Production	• 12.2 By 2030 achieve the sustainable management and efficient use of natural resources
Troutenon	
Component 2. Strengt and land-based pollut	chening knowledge-based action planning for the management of coastal habitats ion to reduce environmental degradation of the South China Sea
Component 2. Strengt and land-based polluti Goal 14. Life below Water	 thening knowledge-based action planning for the management of coastal habitats ion to reduce environmental degradation of the South China Sea 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
Component 2. Strengt and land-based polluti Goal 14. Life below Water Goal 1. End Poverty in all its forms everywhere	 thening knowledge-based action planning for the management of coastal habitats ion to reduce environmental degradation of the South China Sea 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
Component 2. Strengt and land-based polluti Goal 14. Life below Water Goal 1. End Poverty in all its forms everywhere Goal 6. Clean Water and Sanitation	 thening knowledge-based action planning for the management of coastal habitats on to reduce environmental degradation of the South China Sea 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally 6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

SDG Goal	Main relevant targets to the South China Sea								
Goal 12. Responsible Consumption and Production	 12.2 By 2030 achieve the sustainable management and efficient use of natural resources 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production 								
Goal 13. Climate Action	 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries 13.2 Integrate climate change measured into national policies, strategies and planning 								
Component 3. Facilitating regional and national level integration and cooperation for implementation of the South China Sea Strategic Action Programme									
Goal 5. Gender Equality	 5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws 5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women 								
Goal 8. Decent Work and Economic Growth	 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small-, and medium-sized enterprises, including through access to financial services 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead 8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products 								
Goal 12. Responsible Consumption and Production	• 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature								
Goal 15. Life on Land	• 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems								
Goal 17. Partnerships for the Goals	 17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships 								

13. The **UN Decade of Action** launched in 2020, includes numerous thematic decades. The UN Decade on Ecosystem Restoration, supported by UNEP, FAO and CBD has as overarching goal to stop and reverse the destruction and degradation of billions of hectares of ecosystems in cooperation with all key stakeholders, organizations and governments. Also, the UN Decade of Ocean Science, coordinated by IOC-UNESCO will provide a common framework to ensure that ocean science can fully support countries' actions to sustainably manage the Oceans, embracing a participative and transformative process, so that scientists, policy makers, managers, and service users can work together to ensure that ocean science delivers greater benefits for both the ocean ecosystem and society.

Relevant UN Environment Subprogramme and UNEA Resolutions

14. The SCS SAP Project contributes to the **UNEP Programme of Work (PoW) 2020/2021**, **Subprogramme 3: Healthy and productive ecosystems**, and its following expected accomplishment and indicator:

a) The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector and transboundary collaboration frameworks at the national and international levels:

(iii) the number of countries and groups of countries that improve their cross-sector and transboundary collaboration frameworks for marine and terrestrial ecosystem management

15. The objective of the project is to assist countries in meeting the targets of the approved Strategic Action Programme (SAP) for the marine and coastal environment of the South China Sea (SCS) through implementation of the National Action Plans in support of the SAP, and strengthening regional coordination for SCS SAP implementation. This will therefore directly contribute to UNEP POW EA (a) (iii). It will also indirectly contribute to

- (a) (i) through support to countries to enhance monitoring programs,
- (a) (ii) through activities to assess the economic values of mangroves, coral reefs, seagrasses and wetlands,
- (b) (i) through engagement of private sectors and establishing a mechanism for their contribution to SAP implementation

16. The relevant <u>United Nations Environment Assembly</u> (UNEA) resolutions are considered relevant to the SCS SAP project. The Contributions of the UN Environment Assembly to the 2020 High-level Political Forum on Sustainable Development (<u>UNEP</u>, 2020), which notes that the COVID-19 outbreak calls for the urgent need to address threats to wildlife and ecosystems and recognizes the role of regional level coordination as key to address transboundary issues and facilitate regionally coherent approaches, are also considered.

Relevant UNEA Resolutions

- UNEA 1 (2014) resolutions 1/5 Chemical and waste; 1/6 Marine plastic debris and microplastics; and 1/8 Ecosystem-based adaptation;
- UNEA 2 (2016) "Strengthening the science-policy interface" resolutions 2/8 Sustainable consumption and production; 2/10 Oceans and seas; and 2/12 Sustainable coral reefs management
- UNEA 3 (2017) "Towards a Pollution-Free Planet" resolution 3/10 Addressing water pollution to protect and restore water-related ecosystems;
- UNEA 4 (2019) "Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production" resolutions: 4/4 Addressing environmental challenges through sustainable business practices; 4/11 Protection of the marine environment from land-based activities; 4/12 Sustainable Management for Global Health of Mangrove; 4/13 Sustainable coral reefs management;

Convention on Biological Diversity

17. The **Convention on Biological Diversity's (CBD)** <u>Strategic Plan for Biodiversity 2011-2020</u>, includes five Strategic Goals and 20 Aichi Biodiversity Targets, with corresponding indicators (<u>CBD</u>, 2016). Work is ongoing to develop the <u>Post 2020 Biodiversity Framework</u> which includes regional and thematic consultations. The Thematic Workshop on Marine and Coastal Biodiversity for the Post-

2020 Global Biodiversity Framework was held in November 2019 (CBD, 2019) with the participation of China, Indonesia and Thailand. The vision of the framework is *a world of living in harmony with nature where: "By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."*, which is line with the SCS SAP.

18. This process will be followed to ensure links with the monitoring and reporting on the SCS SAP implementation.

Relevant 2030 Action Targets for the SCS SAP

(a) Reducing threats to biodiversity

- Target 1. By 2030, [50%] of land and sea areas globally are under spatial planning addressing land/sea use change, retaining most of the existing intact and wilderness areas, and allow to restore [X%] of degraded freshwater, marine and terrestrial natural ecosystems and connectivity among them.
- Target 2. By 2030, protect and conserve through well connected and effective system of protected areas and other effective area-based conservation measures at least 30 per cent of the planet with the focus on areas particularly important for biodiversity.
- Target 6. By 2030, reduce pollution from all sources, including reducing excess nutrients [by x%], biocides [by x%], plastic waste [by x%] to levels that are not harmful to biodiversity and ecosystem functions and human health.
- Target 7. By 2030, increase contributions to climate change mitigation adaption and disaster risk reduction from nature-based solutions and ecosystems-based approaches, ensuring resilience and minimizing any negative impacts on biodiversity.

(c) Tools and solutions for implementation and mainstreaming

- Target 13. By 2030, integrate biodiversity values into policies, regulations, planning, development processes, poverty reduction strategies and accounts at all levels, ensuring that biodiversity values are mainstreamed across all sectors and integrated into assessments of environmental impacts.
- Target 17. By 2030, redirect, repurpose, reform or eliminate incentives harmful for biodiversity, including [X] reduction in the most harmful subsidies, ensuring that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity.
- Target 18. By 2030, increase by [X%] financial resources from all international and domestic sources, through new, additional and effective financial resources commensurate with the ambition of the goals and targets of the framework and implement the strategy for capacity-building and technology transfer and scientific cooperation to meet the needs for implementing the post-2020 global biodiversity framework.
- Target 19: By 2030, ensure that quality information, including traditional knowledge, is available to decision makers and public for the effective management of biodiversity through promoting awareness, education and research.
- Target 20: By 2030, ensure equitable participation in decision-making related to biodiversity and ensure rights over relevant resources of indigenous peoples and local communities, women and girls as well as youth, in accordance with national circumstances.

19. The SCS SAP also contributes to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Ramsar Convention.

Regional Level Strategic Alignment

20. The benefits of regional cooperation in marine environmental management were recognised since 1981 when the five original ASEAN states, under the auspices of the UNEP regional seas programme, approved the Action Plan for the Protection and Development of the Marine and Coastal Areas of the East Asian Region (EAS Action Plan). There is no convention in the East Asian Seas

(EAS) region. The Coordinating Body on the Seas of East Asia (COBSEA) is a regional intergovernmental mechanism that oversees the implementation of the EAS Action Plan, which has been superseded to some extent by the COBSEA Strategic Direction 2018-2022. The Strategic Directions, which guide participating countries in actions towards the development and protection of the marine environment and coastal areas in the East Asian Seas, encompasses two substantive themes: Land-based marine pollution; and Marine and coastal planning and management; as well as an overarching Governance theme.

21. Numerous other programmes, projects, agencies, organisations and donors operate in the region. The major regional players, in addition to COBSEA and the SCS SAP Project are: the Association of Southeast Asian Nations (ASEAN) and its Dialogue Partners and Regional Working Groups, the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), the Asia-Pacific Economic Cooperation (APEC), the Mekong River Commission (MRC), the Asia-Europe Meeting (ASEM) and the World Fish Centre. Two other players of interest have been the Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL). Numerous institutions and organisations operate or fund projects alone or in cooperation with others, such as the Coral Triangle Initiative, International Coral Reef Action Network, the International Coral Reef Initiative, the International Union for Conservation of Nature (IUCN), the Asian Development Bank (ADB), the World Bank, the International Maritime Organization (IMO), the World Wildlife Fund for Nature (WWF), the Canadian International Development Agency (CIDA) and the Swedish International Development Agency (SIDA).

22. Numerous actions are taking place at the national and regional levels to address the environmental problems that have resulted from the rapid pace of development and industrialization, supported by various International NGOs including WWF, IUCN and Wetlands International; bilateral assistance agencies such as the Danish International Development Agency (DANIDA) and SIDA; and multi-lateral entities such as the EU. Many of these include examples of community-based approaches to management of coastal resources or sectors, and include poverty alleviation as a major objective. All countries have activities and programmes related to the conservation of significant coastal biological diversity including wetlands.

3. PROJECT ORGANIZATION AND COORDINATION MECHANISMS

3.1. EXECUTING AGENCY ARRANGEMENTS

23. The SCS SAP Project is executed by Southeast Asian Fisheries Development Center (SEAFDEC) and the United Nations Office of Project Services (UNOPS), as elaborated in Figure 5.

Figure 5. SEAFDEC and UNOPS execution



* The Project Director is liable and accountable towards UNOPS, while guides and coordinates the whole Initiative, including SEAFDEC activities. He/she coordinates all funds and expenditures, however as a UNOPS contractor can only sign UNOPS expenditure reports, budget, funds request, contracts etc. Hence, for execution of funds under SEAFDEC responsibility will be authorized by a SEAFDEC official once reviewed by the Senior Project Manager.

24. SEAFDEC is the inter-governmental body "To promote and facilitate concerted actions among the Member Countries to ensure the sustainability of fisheries and aquaculture in Southeast Asia." SEAFDEC is also the executing agency of the UNEP GEF Project 'Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand'. Both projects cooperate together to implement the SAP and therefore SEAFDEC will host the regional Project Coordination Unit (PCU) in their Training Department at Samut Prakarn, Thailand, thereby facilitating the coordination between both projects. They will support the execution of all regional activities and contracts, staff, consultants and meeting participants travel, organization of all meetings, training and workshops and be responsible for the general operation and communication activities. In addition, they will ensure strong linkages with their National Coordinators and relevant fisheries ministries within the project. 25. UNOPS is the operational arm of the United Nations and presently acts as the Executing Entity for a large number of GEF projects globally and in the East Asian region. UNOPS possesses extensive expertise and experience in human resource management and contract management, and will take responsibility, in close consultation with UNEP for the hiring of the professional personnel of the regional Project Coordination Unit (PCU) and for the engagement of identified implementing partners (the Focal Ministries and National Institutions) executing activities at the national level in the six participating countries. As an external Executing agency for UN Environment, UNOPS would be contractually obligated to UNEP and the participating countries and, would ensure the timely engagement of the implementing partners including the processing of fund transfers to national entities under appropriate contractual modalities under the project and to meet the high-level business standards required to ensure the efficient operation of a complex project of this magnitude. In executing the project UNOPS will apply its administrative framework.

26. Both SEAFDEC and UNOPS have respective agreements with UNEP which fully define their obligations for the execution of the SCS SAP agreement, and are responsible vis-à-vis UNEP to implement their respective obligations in accordance with their own applicable regulations, rules and procedures and within the budget allocated to them.

27. The COBSEA will continue in its role of inter-governmental convening platform on the Seas of East Asia.

3.2. OVERALL PROJECT COORDINATION AND ORGANOGRAM

28. Figure 6 presents the organogram of the project structure and regional and national level coordination mechanisms, which follows the same approach used in the previous UNEP GEF "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" which was considered overall extremely successful in ensuring the engagement of all national stakeholders. Terms of Reference (TORs) for each regional and national committee and working group is included in Annex 4.

Regional decision-making and planning

29. The Project Coordination Unit (PCU) will have responsibility for the day-to-day management of project activities, and oversight of SAP implementation, including liaison with the National Focal Ministries (ministries responsible for environmental matters), the Specialised Executing Agencies (SEAs) at national level and other partners involved in SAP implementation. The work of the PCU shall be directed by the Project Steering Committee (PSC) which shall meet annually and have overall responsibility for the implementation of the SAP and decisions regarding project work plans, timetables, budgets and expenditure. The PSC shall receive advice and recommendations on scientific and technical matters from a Regional Scientific and Technical Committee (RSTC) composed of National Technical Focal Points, the Chairpersons of the regional working groups and task forces together with up to six experts resident in the region. The RSTC in turn shall receive advice and recommendations from the participating countries and the regional bodies and endeavour to secure consensus on scientific and technical matters before advising the PSC on future courses of action.

Figure 6. SCS SAP Organogram



SCSSAP PSC.1/3

30. The SCS SAP Project Steering Committee (PSC) role will be to provide managerial and governance advice to the project, and to guide the PCU in the implementation and monitoring of the overall regional project. It will also provide a regional forum for reviewing and resolving national concerns, reviewing and approving annual work plans and budgets, and provide a regional forum for stakeholder participation. One of the first activities during full project implementation will be to reconfirm and/or reconstitute the membership of the PSC, agree on meeting procedures, and finalise Terms of Reference for the PSC. Full members of the PSC shall consist solely of representatives of all participating countries in the project. Each country shall designate two members: one member shall be the Chairperson of the policy-level, Inter-Ministry Committee; the other shall be the Chairperson of the National Technical Working Group. The UNEP Task Manager will participate in PSC meetings and the Senior Project Manager shall act as Secretary to the meetings of the Committee. The PCU shall convene regular annual meetings and shall operate and take decisions on the basis of consensus, regarding any matter relating to project execution that has regional significance.

31. The Regional Scientific and Technical Committee (RSTC) will be established with responsibility for overseeing the scientific and technical elements of the project; ensuring effective implementation of activities undertaken during project execution; and providing sound scientific and technical advice to the SCS-SAP Project Steering Committee. The RSTC will also be responsible for ensuring that scientific and technical aspects of SCS-SAP Project meet international standards. The RSTC will receive and review reports, data and information from national level activities of the project and oversee the regional syntheses of this information to identify overall needs and priorities for strengthening scientific and technical support to Strategic Action Programme implementation. It will also comment on drafts of national policies and/or action frameworks and advise the PCU and National Technical Focal Points of the need for public awareness and information materials concerning efforts to reverse environmental degradation trends in the South China Sea. The RSTC shall consist of the Chairpersons of the National Technical Working Groups (NTWGs); the Chairpersons of the Regional Working Groups (RWGs) and Regional Task Forces (RTFs); up to 5 selected regional experts; and the Senior Project Manager of SCS-SAP Project Coordination Unit. The RSTC will operate and take decisions on the basis of consensus, regarding any matter relating to project execution that has regional significance.

32. To facilitate the achievement of the Strategic Action Programme the following **Regional Working Groups (RWGs)** are envisaged with overall responsibility for co-ordinating the work of the respective Specialized Executing Agency established in each of the participating countries; ensuring effective implementation of project activities undertaken in the context of the achievement of the SAP targets of the project; and to provide a mechanism for exchange of information and experience of scientific and technical activities in each country relevant to the specific coastal habitats and land-based pollution:

- Regional Working Group on Mangroves (RWG-M),
- Regional Working Group on Coral Reefs (RWG-CR),
- Regional Working Group on Seagrass (RWG-S),
- Regional Working Group on Wetlands (RWG-W) and
- Regional Working Group on Land-based Pollution (RWG-LbP)

33. The RWG of the SCS-SAP Project shall consist of the Chairpersons of the National Mangrove Coral Reefs, Seagrass, Wetlands, Land based pollution Committees together with one member of the SCS-SAP Project Coordination Unit and selected regional experts.

34. Two cross cutting task forces will also be established. **The Regional Task Force on Economic Valuation (RTF-E)** and **the Regional Task Force on Legal Matters (RTF-L)**

National mechanisms

35. The National Inter-Ministry Committees (IMCs) shall assume overarching responsibility for the execution of national level activities of this project in each country. The IMCs will review and approve reports from the National Technical Working Groups and national committees for mangroves, coral reefs, seagrass, wetlands, land-based pollution, and economic valuation regarding the outputs and outcomes of efforts to achieve Strategic Action Programme targets. IMCs will meet on a biannual basis during the operational phase of the project to guide the timely execution of project activities, particularly activities at the site level, and to consider, amend and endorse quarterly work-plans, narrative progress and financial reports for submission to the regional PCU. The IMCs will also provide direction and strategic guidance to the National Technical Working Groups and National Committees for mangroves, coral reefs, seagrass, wetlands, land-based pollution, and economic valuation on the national and local reforms to achieve SAP targets and mainstream best practices in to natural resource and environmental management of the South China Sea marine basin. They will also review planned and ongoing coastal and marine environment projects being operated along the South China Sea coast with the aim of minimising duplication of efforts, and to identify opportunities for cooperation and the sharing of examples of best practices in reversing environmental degradation trends. Importantly these committees will be responsible for assessing stakeholder involvement in national level execution of the SCS SAP Project and take action where necessary to ensure appropriate levels of government, civil society and community organisation, environmental NGOs, Women's groups, and private sector engagement in project activities. They will ensure compatibility between site-based activities of the SCS SAP Project and other National, provincial and municipal activities in coastal and marine environmental management, including for example PEMSEA's ICM initiative. IMCs will also review and approve annual progress reports for transmission to the SCS SAP PCU, SCS SAP PSC, COBSEA Intergovernmental Meetings, UN Environment Programme and the GEF Secretariat as relevant.

36. **National Technical Working Groups (NTWG's)** will review and co-ordinate national scientific and technical activities of the project in each country. They will review and evaluate, from a scientific and technical perspective, progress in the achievement of Strategic Action Programme targets, and provide guidance for improvement when necessary. The NTWGs will provide the IMCs with: recommendations on proposed national and site-based activities, work plans, and budgets; technical guidance and suggestions to improve project activities where necessary, including the reform of policy, legislation and institutional arrangements; facilitate co-operation with relevant national and provincial organisations and projects to enhance the information and science base for use in achieving Strategic Action Programme targets and in preparing updated National Action Plans and a revised Strategic Action Programme in their respective country; and compile and evaluate national level sources of information and data for sharing at the regional level.

37. **National Specialized Executing Agencies (SEAs)** will be engaged by the SCS SAP PCU and assume overall responsibility for the execution of the national-level activities in their respective areas of expertise for this project in accordance with the project results framework. The SEAs will convene quarterly meetings of national committees for mangroves, coral reefs, seagrass, wetlands, land-based pollution, and economic valuation, and will nominate a National Focal Point to: (a) act as the main point of contact with the SCS SAP PCU and UN Environment Programme; (b) act as Chair of the his/her respective National Committee; (c) act as a member of NTWG; and (d) act as a member of the respective Regional Working Group or Task Force. The SEAs will also plan and implement activities based on the results framework, work plan and timetable contained in this document aimed at achieving the national-level goals and targets of the project and the Strategic Action Programme for the South China

Sea. In doing so, the SEAs will engage with national networks to the fullest extent possible and establish institutional linkages with provincial and local governments and communities. SEAs will also be responsible for submitting endorsed national costed work plans to the Senior Project Manager of the SCS SAP PCU and, for preparing and submitting quarterly progress reports, expenditure reports, and cash advance requests for endorsement by the National Inter-Ministry Committee and subsequent submission to the Project Director of the SCS SAP PCU. SEAs will also prepare annual progress reports on national-level activities and results of efforts to meet SAP targets; maintain accurate and up-to-date records and documents in respect of all expenditures incurred with the funds made available to ensure that all expenditures are in conformity with the provisions of the endorsed costed work plans. For each disbursement, proper supporting documentation shall be maintained by the SEAs, including original invoices, bills, and receipts pertinent to the transaction. The SEAs will also provide the SCS SAP PCU with certified periodic financial statements, an annual audit of the financial statements relating to the status of project funds advanced to the SEA, and ensure the proper custody, maintenance and care of all equipment purchased for use at the national level.

Figure 7. Diagrammatic representation of the linkages provided through the individual national focal points for each component or sub-component between: the national component committees, the national technical working group and inter-ministry committees; and the regional working groups, regional scientific and technical committee and the project steering committee



4. PROJECT COMPONENTS, ACTIVITIES AND EXPECTED RESULTS

COMPONENT 1. REDUCING HABITAT DEGRADATION AND LOSS VIA NATIONAL AND LOCAL REFORMS TO ACHIEVE STRATEGIC ACTION PROGRAMME TARGETS FOR COASTAL HABITAT MANAGEMENT IN THE SOUTH CHINA SEA

38. This component will result in appropriate forms of sustainable management established for 860,000 ha of mangrove; 63,000 ha of coral reef at 46 priority sites managed sustainably, including a reduction in the decadal rate of degradation in live coral cover from 16 to 5%; conservation, management and sustainable use of 25,900 ha of known seagrass area in the South China Sea; integrated management of 783,900 ha of coastal wetland at 19 sites, including habitat restoration and protection strengthened at priority locations; and national and regional level cooperation in tracking results of SAP actions for coastal habitat management. Importantly, the operationalization of management measures at each of the priority mangrove, coral reef, seagrass and wetlands sites will be undertaken within a broader Marine Spatial Planning framework. The aim of which is to facilitate: multi-objective planning which recognises the connections between land, freshwater and marine ecosystems, and human uses and impacts in each of these systems; the promotion of ecosystem approaches in the forward thinking planning of human uses and non-uses in the marine environment, followed by the implementation of these plans; and the strengthening of institutional and legal frameworks to enable improved crosssectorial and multi-stakeholder participation in coastal and marine environmental and resource management. The package of environmental stress reduction and habitat protection measures to be implemented as part of component 1 represents a globally significant test of Marine Spatial Planning approaches that will yield many lessons for the management of other shallow water marine basins and large marine ecosystems. Significantly, the embedding of activities under this component to operationalize the monitoring and evaluation of the results of the project's habitat management measures will assist in building knowledge of the realities of implementing Marine Spatial Planning approaches. Each of the outcomes to be delivered through Component 1 of the project are outlined below.

39. For the outcomes and targets detailed below it should be noted that all baseline assessments of the sites have been made accessible online at <u>http://gis.unepscs.org</u> developed and included in the 2008 SAP. A supporting meta-database of the data used to establish the baselines has also been developed as a preparatory activity. Detailed national reports on the status and trends in wetlands and wetland management were also published in preparation for SAP implementation². Updated data will be conducted in the update of all national reports during the first year of execution.

40. Particular focus will be given to bring in experiences from other partners, and initiatives, such as the UN Decade on Ecosystem restoration, the work under the CBD Post-2030 Framework, and establishing links with global databases such as with the UNEP World Conservation Monitoring Centre (WCMC) and World Environment Situation Room among others.

41. Execution of these activities will be undertaken through agreements with UNOPs and the National Specialized Executing Agencies (SEAs), and will be fully elaborated in the National Implementation Reports under development. This may result in some updating of sites and targets as indicated below, to be adopted by the SCS SAP Project Steering Committee.

² Accessible online at http://www.unepscs.org/South_China_Sea_National_Reports/

Outcome 1.1 Appropriate forms of sustainable management established for 860,000 ha of mangrove

42. Information relating to the management of mangrove areas in the six participating countries is presented in Table 18. Five categories of mangrove forest are recognised in the region: production forest, used on a sustainable basis for timber and wood chip production; conversion forest, a category in Indonesia representing areas of mangrove land designated for alternative land use under current development plans; Parks and Protected Areas; and areas in which timber extraction is not permitted but extractive use of other resources is permitted. In the case of Thailand, another category is recognised, namely "Private land, unregulated use" that accounts for 10,000 hectares.

43. The SCS SAP and national reports identified key priorities and targets for the sustainable management of mangroves. This will be achieved through six outputs which will be executed fully at the national level through national contracts through UNOPS and are fully detailed in the National Implementation Reports prepared during the Inception Phase.

44. In preparation for implementation of the mangrove activities of the SAP, comprehensive site characterization information and data were compiled to establish detailed baselines for the 26 mangrove sites identified as priority locations for management within the framework of SAP implementation. These site characterisations contain geographical coordinates, information on the physical environment, environmental state information, socio-economic and resource use information, biological data, and information on the status of existing management at these sites. These baseline assessments of the sites and the supporting meta-database of the data used to establish the baselines are available online at www.unepscs.org. A summary of information at the 26 sites is presented in Table 3 and 4.

45. The National Implementation Reports to be finalized will review and detail project activities in these sites and also propose where relevant changes to sites and activities which have already been addressed since SAP adoption.

Site	Present Area (ha)	Zones spp. assoc	% change in area	True mangrove spp.	Density >1.5m high /Ha	% cover	No. Crustacean. spp.	No Bivalve	No. Gastropod spp.	No Fish spp.	No Bird spp.	No migratory bird spp.
	China											
Shangkou	812	4	11	9	11,980	90	65	40	33	95	28	76
Qinglangang	1,189	6	-56	25	10,183	80	60	50	62	90	39	32
Dongzhaigang	1,513	5	-14	16	8,433	80	32	24	27	84	43	35
Futien	82	3	-26	7	10,233	80	29	16	21	11	58	99
Fangchenggang	1,415	4	-10	10	12,300	90	67	62	40	71	42	145
					Indon	esia						
Belitung Island	22,457	5	0	8	467	100	5	26	43	71	М	М
Angke Kaput	328	9	-2	12	569	70	29	21	4	22	40	4
Batu Ampar	65,585	5	0	21	2,391	100	11	15	17	51	19	27
Ngurah Rai	1,374	6	27	25	660	100	38	10	32	34	38	42
Bengkalis	42,459	7	-15	18	490	99	12	8	9	3	16	15
					Philipp	ines						
Busuanga	1,298	5	-5	24	7,550	90	6	15	36	9	45	27
Coron	1,296	5	-50	26	7,080	М	7	15	37	13	42	34
San Vicente	133	5	-15	14	3,780	80	6	15	36	13	36	40
Ulugan	790	4	-10	16	5,100	85	8	15	36	13	42	39
San Jose	483	4	-80	25	3,180	60	7	13	34	7	48	37
Subic	148	3	-20	23	1,420	90	8	14	35	16	44	57
Quezon	1,939	5	-40	32	4,000	80	5	14	37	11	44	37
Thailand												
Trad Province	7,031	5	2	33	1,100	90	32	М	м	55	98	24
Thung Kha Bay - Savi Bay	3,543	4	34	23	1,628	90	58	Μ	м	36	13	8
Pak Phanang Bay	8,832	3	2	25	1,282	56	36	М	М	85	72	45
Kung Kraben Bay	640	2	0	27	6,100	80	19	Μ	М	35	75	16
Welu River Estuary	5,478	3	31	33	1,400	60	25	М	М	52	69	15
Viet Nam												
Tien Yen	2,537	2	-25	13	7,000	60	51	Μ	М	79	М	М
Xuan Thuy	1,775	3	98	11	9,500	75	61	25	30	90	31	62
Can Gio	8,958	3	100	32	6,000	80	28	17	32	103	96	34
Ca Mau	5,239	3	60	30	7,500	85	12	6	15	36	18	53

Table 3. Selected physical and biological properties and variables for the 26 priority mangrove sites for management within the framework ofStrategic Action Programme implementation. (M = data unavailable)

	Cambodia	China	Indonesia	Philippines	Thailand	Viet Nam	Total
Output 1.1.1 Declaration of 57,400 ha of mangrove as National Parks and Protected Areas	0	5,330	20,000	631	1,400	30,000	57,400
1.1.2 Designation and plans for the management of 166,600 ha of mangrove as non-conversion, sustainable use areas	0	0	165,000	0	1,600	0	166,600
1.1.3 Reform of laws and regulations for the sustainable use of 602,800 ha of mangrove forest	49,900	0	490,800	2,000	10,000	50,000	602,800
1.1.4 Replanting of 21,000 ha of deforested mangrove land	2,500	500	0	2,000	8,000	8,000	21,000
1.1.5 Biodiversity increased for 11,200 ha of mangrove forest via enrichment planting	0	5,000	0	1,000	3,200	2,000	11,200
1.1.6 Established mechanism for monitoring management, ecological and socio-economic indicators at 26 sites [based on SAP results framework]	52,400	10,830	675,800	5,631	24,200	90,000	859,000

Table 4. Outcome 1.1 outputs and targets for mangrove management

46. National level activities of this project will focus on the declaration of 57,400 ha of mangrove as National Parks and Protected Areas, the designation and plans for the management of 166,600 ha of mangrove as non-conversion, sustainable use areas, national reform of laws and regulations for the sustainable use of 602,800 ha of mangrove forest, replanting of 21,000 ha of deforested mangrove land and biodiversity increased for 11,200 ha of mangrove forest via enrichment planting.

47. The project also aims to support these national actions through a regionally co-ordinated programme of technical support; the objective of which is to assist countries in effectively and sustainably managing their mangrove resources. This will include periodic national and regional meetings of mangrove specialists, and local and central government officials that will ensure the integration of sound science into policy making and management decision making, and foster cost effective strategic actions that enhance regional cooperation.

48. It will also involve furthering the knowledge of government officials, managers and stakeholders regarding the functions, value and approaches to sustainable management of mangrove ecosystems will be further strengthened through regional mechanisms such as continued information exchange via the World Wide Web; study tours and visits; periodic meetings and targeted training activities; and the development and dissemination of the necessary materials for use at all levels in promoting knowledge and awareness of sustainable mangrove management practices. Activities designed to provide the sound scientific and technical basis for sustainable management of mangrove ecosystems at the regional level include: the development of guidelines and other tools as information resources; facilitation of their regional dissemination and adoption by mangrove managers; and applied research concerning the sustainable management and monitoring of mangroves ecosystems.

Outcome 1.2: 110,430 ha of coral reef at 46 priority sites managed sustainably

49. The characterization of target coral reef sites bordering the South China Sea, including inter alia their legal status and the effectiveness of management was undertaken in preparing the coral reef of component of the Strategic Action Programme. The area of coral reefs in the 46 target coral reef sites is 174,048ha (excluding Malaysia).

Country & Site Name	Area (ha)	Live Coral Cover (%)	Management legal status	Area under Management (ha)
Cambodia	2,808			293
Koh Kong archipelago	73	47	Fisheries Management Area (FMA)	
Koh Sdach archipelago	529	29	Proposed MPA	
Koh Rong archipelago	468	23	Proposed MPA	
Koh Takiev archipelago	293	58	National Park	293
Koh Tang archipelago	439	38	FMA	
Prek Ampil	953	53	FMA	
Koh Pouh archieplago	53	41	FMA	
Indonesia	39,286			12,511
Anambas	6,255	52	Marine Management Area (MMA)	6,255
Bangka	2,934	37	MMA	2,934
Belitung	2,271	52	MMA	2,271
Karimata	1,041	53	Marine Reserve	1,041
Senayang Lingga	4,735	37		
Barelang dan Bintan	6,145	44		
Natuna	15,905	31		
Philippines	464,000			2,390
Batanes	2,050	55	Protected Land/Seascape	40
Bolinao/Lingayen Gulf	9,560	40	Municipal Coastal Development Plans & National Park	750
Masinloc, Zambales	2,000	31	Protected Land/Seascape & Fish Sanctuary	120
Batangas Bay, Maricaban Strait	100	52	Marine Tourism Reserve	80
Puerto Galera, Mindoro	48	22	Man & Biosphere Reserve	20
Calamianes Group of Islands	18,200	29	•	300
El Nido, Palawan	4,250	21	Marine Park	1,000
Port Barton	454	38.2		80
Balabac	2500		Environmental Critical Protection Zone	
Thailand	90,000			54,000
Mu Koh Chumporn	7,790	55	National Park	7,360
Mu Koh Chang	18,670	40	Marine National Park	11,780
Mu Koh Ang Thong	5,110	55	Marine National Park	5,110
Mu Koh Samui	38,990	40	Marine National Park	22,770
Mu Koh Samet	4,200	35	Marine National Park	3,240
Sichang Group	760	20	None	0
Sattaheep Group	1,670	33	Navy Control Area	1,320
Lan and Phai Group	3,910	18	Navy Control Area	1,200
Chao Lao	860	30	None	0
Prachuab	2,450	40	Marine National Park	270
Koh Tao Group	2,300	45	None	0
Song Khla	1,200	20	None	0
Koh Kra	670	40	None	0
Losin	950	40	Navy Control Area	950
Viet Nam	110,000			2,270
Cu Lao Cham	200	34	MPA	100
Nha Trang bay	570	26	MPA	100
Con Dao	1,000	23	National Park	1,000
Phu Quoc	600	42	Proposed MPA	0
Ninh Hai	1,070	37	Proposed MPA & Community -based Management	1,070
Ca Na bay	2,270	41	Proposed MPA	0
Ha Long - Cat Ba	N/A	43	World Heritage & National Park	No Available
Hai Van - Son Tra	N/A	51	Proposed MPA	0
Bach Long Vi	N/A	22	Proposed MPA	0

Table 5. Management status of coral reef sites in the South China Sea (based on SAP)

50. The general status of coral reef management in the South China Sea geographic region was also assessed as part of SAP development preparation and is summarized in Table 6. This summary was prepared on the basis of the best available information for 46 individual coral reef areas compiled in the national reports on coral reefs. According to the RWG-Coral Reefs by the year 2015. 71% of the area of the target sites are under management, leaving 110,430 ha to be managed through the SCS SAP project.

Outputs	Cambodia	Indonesia	Philippines	Thailand	Viet Nam	TOTAL
 1.2.1 Management capacity built for 82 coral reef sites 1.2.2 Management approaches and policy, legal & institutional reforms (integrated, community- based, multiple use) improved at 82 coral reef sites 1.2.3 Management tools (licensing and permit systems, seasonal closures, zoning) developed and utilized to address key threats at priority sites 1.2.4 Established mechanism for the monitoring of management, ecological and socio- economic indicators at 82 sites 	Koh Kong archipelago Koh Sdach archipelago Koh Rong archipelago Koh Takiev archipelago Koh Tang archipelago Prek Ampil Koh Pouh archieplago	Anambas Bangka Belitung Karimata Senayang Lingga Barelang dan Bintan Natuna	Batanes Bolinao/Lingaye n Gulf Masinloc, Zambales Batangas Bay, Maricaban Strait Puerto Galera, Mindoro Calamianes Group of Islands El Nido, Palawan Port Barton Balabac	Mu Koh Chumporn Mu Koh Chang Mu Koh Ang Thong Mu Koh Samui Mu Koh Samui Sichang Group Sattaheep Group Lan and Phai Group Chao Lao Prachuab Koh Tao Group Song Khla Koh Kra Losin	Cu Lao Cham Nha Trang bay Con Dao Phu Quoc Ninh Hai Ca Na bay Ha Long - Cat Ba Hai Van - Son Tra Bach Long Vi	46 sites
Total coral reef area in the South China Sea (ha)	2,808	39,300	464,000	90,000	110,000	706,108
Total coral reef area of the 82 target sites	2,808	39,300	36,700	89,530	5,710	174,048
Coral reef area to be supported in SCS SAP project	2,260	18,100	12,500	72,000	5,570	110,430

Table 6. Outcome 1.2 outputs, sites and targets for the management of coral reefs

Based on Table 22 of the project document.

51. At the site and national levels, activities will include supporting building management capacity (number/levels human resources, facilities and equipment, and sustainable financing mechanisms) for 46 coral reef sites, improving management approaches (integrated, community-based, multiple use) at 46 coral reef sites, developing management tools (licensing and permit systems, seasonal closures, zoning) in support of legal and regulatory reforms to address key threats at priority sites, and establishing mechanisms for monitoring management, ecological and socio-economic indicators at 46 coral reef sites.

52. Regional actions will focus on the review, synthesis, assessment and dissemination of good experiences and lessons learnt in the management of coral reefs. The use of sound science in the sustainable management of coral reefs in the South China Sea will be promoted through: the work of the regional expert group; empowerment of stakeholders and communities; and sharing experiences between countries on coral reef research and management. Increased awareness of stakeholders regarding the ecological roles, economic values, and need for sustainable management of coral reefs underpins successful achievement of the SAP targets; and activities will facilitate the mainstreaming of information into educational programmes, the development of information campaigns and sharing of training materials through the regional website.

53. Despite the wealth of information available on the ecology of coral reefs, scientific data and information relevant to the sustainable management of coral reefs is limited. Regional actions will support the scientific community in: periodic assessment of the status of coral reefs; monitoring ecological and socio-economic factors; maintaining, and updating the regional GIS and meta-databases and disseminating information for management purposes; and developing guidelines for the conduct of

environmental impact assessments in transboundary coral reef areas. Strengthening regional and national capacity in the management of coral reefs will also be supported by expert exchange between countries; training of trainers; sharing experiences in enforcement; developing capacity in fund raising and financial sustainability; fostering the network of coral reef management sites, research centres and coral reef management agencies; and provision of guidelines for sustainable use of coral reefs.

Outcome 1.3 Conservation, management and sustainable use of 15,848 ha of known seagrass area in the South China Sea

54. On the basis of data collated and analysed in preparation of the seagrass component of the Strategic Action Programme, a total of 30 target seagrass sites for management are recorded in the coastal areas bordering the South China Sea. These comprise: Cambodia 33,800 ha from 4 sites; China 1,960 ha from 4 sites; Indonesia 3,035 ha from 7 sites; Philippines 23,200 ha from 5 sites; Thailand 2,550 ha from 4 sites; and Viet Nam 13,500 ha from 6 sites (see Table 7).

Country and Site Name	Area (ha)	Legal Status Area under Management		Target for Management through SAP
Cambodia	33,814		2,000	11,446
Kampong Sam Bay	164	None	No	0
Chroy Pros	3,910	Provincial designated MPA	2,000	0
Kampot	25,240	Proposed fish Sanctuary	No	10,096
Kep Beach & Koh Tonsay	4,500	None	No	1,350
China	1,960		150	700
Hepu seagrass bed	540	National Dugong Reserve	150	150
Liusha seagrass bed	900	None ³	No	200
LiAn seagrass bed	320	Proposed Marine Park	No	200
Xincun seagrass bed	200	Proposed Marine Park	No	150
Indonesia	3,035		0	2,420
Medang-Mesanak	5	None	No	5
Temiang	5	None	No	5
East Bintan	2,000	Proposed Marine Management Area	No	1,500
Mapor	275	Proposed Marine Management Area	No	275
Anambas	150	Proposed Marine Management Area	No	35
Bangka-Belitung	350	Proposed Marine Management Area	No	350
Senayang	250	Proposed MPA	No	250
Philippines	23,245		6,641	6,920
Cape Bolinao	22,400	Environmentally Critical Area - MPA	6,000	6,720
Puerto Galera	114	Fish sanctuary part of the Man and Biosphere reserve/	60	50
Ulugan Bay	11	Fish sanctuary part of the Man and Biosphere reserve/	11	0
Honda Bay	470	Fish Sanctuary part of the Man and Biosphere reserve/	320	150
Puerto Princesa	250	Protected Area part of the Man and Biosphere reserve/	250	0
Thailand	2,553		1,780	0
Kung Krabane Bay	700	None ⁴	700	0
Tungka Bay	1,080	National Park	1,080	0
Sarat Thani	500	None	No	0
Pattani Bay	273	None	No	0
Viet Nam	13,503		2,340	5,050
Phu Quoc archipelago	4,600	Phu Quoc Marine Protected ⁵ Area	2,050	3,000
Con Dao Islands	200	National Park	200	200
Phu Qui Island	400	Proposed MPA	No	0
Thuy Trieu	800	Proposed MPA	50	350
Tam Giang	2,000	Proposed Ramsar	No	1,000

Table 7 Status of known seagrass sites in the South China Sea

³ Local Reserve.

⁴ Under a King of Thailand's project.

⁵ Phu Quoc National Park is an area of designated terrestrial Forest whilst the Marine Protected Area has recently been declared by the Provincial Government adjacent to the National Park.

Country and Site Name	Area (ha)	Legal Status	Area under Management	Target for Management through SAP
Cu Lao Cham	40	MPA	40	0

55. A review of the management status of seagrass sites indicates that 16.5% of the total known area of seagrass in the South China Sea is currently under some form of management, although the effectiveness of management was rated medium to low. Very few seagrass sites have any specific legal status. To address this, it was agreed that 15,848 ha would be targeted in 20 sites to be brought under sustainable management through SAP implementation as presented in Table 8.

Outputs	Cambodia	China	Indonesia	Philippines	Thailand	Viet Nam	TOTAL
 1.3.1 Twenty-one seagrass areas totalling 15,848 ha under sustainable management with supporting laws and regulations 1.3.2 Amended management plans for 7 existing MPAs with significant seagrass areas, to include specific seagrass-related management actions and policy, legal & institutional reforms 1.3.3 Designation of 7 new Marine Protected Areas focusing on seagrass areas 1.3.4 Established mechanism for monitoring management, ecological and socio- economic indicators at 21 sites 	Kampot Kep Beach & Koh Tonsay	Hepu seagrass bed Liusha seagrass bed LiAn seagrass bed Xincun seagrass bed	Medang- Mesanak Temiang East Bintan Mapor Anambas Bangka- Belitung Senayang	Cape Bolinao Puerto Galera Honda Bay	N/A	Phu Quoc archipelago Con Dao Islands Thuy Trieu Tam Giang	20 sites
Total seagrass area in the 20 target sites (ha)	29,740	1,960	3,035	22,984		7,600	65,319
Target for management through the SCS SAP project	2,808	700	2,420	6,920		3,000	15,848

	Fable 8.	Outcome 1.3	outputs, sites	and targets for tl	he management (of seagrasses
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56. Activities in support of achieving Outcome 1.3 are aimed at assisting countries in effectively managing their seagrass resources and ecosystems in a sustainable manner including supporting countries in engaging in the relevant national reforms. This will be done through: regional co-ordination of national actions in SAP implementation; the regional sharing of experiences and practices; and the exchange of views and knowledge among the scientific and local communities with local government. Specific national activities will include putting under sustainable management with supporting laws and regulations twenty seagrass areas, amending national management plans for 7 existing MPAs with significant seagrass areas, to include specific seagrass-related management actions, designating 7 new Marine Protected Areas focusing on seagrass areas identified in the prioritized listings of the SCS Project and establishing mechanisms for monitoring management, ecological and socio-economic indicators at 20 sites.

57. The need to enhance the knowledge and awareness of government officials, managers, and stakeholders concerning the importance and value, of seagrass resources and ecosystems in the region is perhaps greater than in the case of mangroves and coral reefs. This component also includes actions required to maintain and elaborate regional mechanisms for knowledge and information exchange through training, site visits, meetings, regional symposia, a South China Sea website, and publications;
and the production of materials for use in promoting knowledge and awareness of seagrass ecology and sustainable practices. Activities are also designed to enhance the management skills and experience of all stakeholders by providing a sound scientific and technical basis for the management of seagrass resources and ecosystems in the South China Sea. Given the current uncertainties regarding the extent and diversity of seagrass in the region effort will be expended to enhance the knowledge of seagrass distribution and socio-economic importance, and to develop appropriate criteria for selecting regional and national priority sites for future intervention and management.

Outcome 1.4 Integrated management of 783,900 ha of coastal wetland at 19 sites, including habitat restoration and protection strengthened at priority locations

58. The wetland component of the Strategic Action Programme focuses on five specific types of wetlands, namely intertidal mudflats, estuaries, lagoons, peat swamps and non-peat swamp, excluding mangroves, coral reefs and seagrass beds which are the subjects of separate components and addressed above. Table 9 summarises from the SAP, the legal and management status of major lagoons, estuaries, inter-tidal mudflats, peat swamps and non-peat swamps bordering the South China Sea. A total area of 4,201,145ha of the five specific types of wetland sites has been identified, specifically lagoons (34,921ha), estuaries (1,203,871ha), inter-tidal flats (691,859ha), non-peat swamps (1,623,567ha), peat swamps (646,927 ha).

	Legal and Management Status				
Name of site	Area (ha)	Protected – Non-use	Sustainable	Non-sustainable	
		(Subsistence/commercial)	use	use	
		Estuaries			
Cambodia					
Koh Kapik Ramsar in Koh Kong	12 000	National Park and RAMSAR site	ΝΔ	ΝΑ	
Province	12,000	National Fark and NAMOAR Site	N.A.	N. Л.	
China					
Pearl river	12,783	Wetland Park (200ha)	N.A.	N.A.	
Beilun river	1,083	National level nature reserve	N.A.	N.A.	
Indonesia					
Bakau Selat Dumai	60,000	Yes			
Pulau Padang dan Tanjung	111 500			N	
Pandan	111,500	-		v	
Muara Sungai Guntung	26,000	Small part		\checkmark	
Delta Banyuasin	200,000	Yes			
Sembilang	387,500	Yes	-	-	
Philippines					
Malampaya Sound	24,500	Protected seascape	N.A.	N.A.	
Pansipit River Estuary	15	N.A.	N.A.		
Thailand					
Pattani Bay	6,149	N.A.	N.A.	\checkmark	
Ban Don Bay	49,459	N.A.	N.A.	\checkmark	
Welu River Estuary	10,400	N.A.	N.A.	\checkmark	
Thung Kha Bay-Savi Bay	5,204	National Park	N.A.	N.A.	
Pak Phanang Bay	13,597	N.A.		N.A.	
Viet Nam					
Balat Estuary	26,397	National Park and National Nature Reserve	N.A.	N.A.	
Tien River Estuary	100,691	Than Phu Nature Reserve – small part of the estuary	l part N.A. √		
Dong Nai River Estuary	49,711	Can Gio Biosphere Reserve	N.A.	\checkmark	
Van Uc Estuary 6		N.A.	N.A.	\checkmark	
Bach Dang Estuary	80,358	N.A.	N.A.	\checkmark	
Tien Yen Estuary	24,738	N.A.	N.A.		
SUBTOTAL	1,203,871	692,184	38,097	328,511 [+137,500]	
		Peat Swamps			
Cambodia					

Table 9 Legal and management status of known inter-tidal mudflats, estuaries, coastal lagoons and coastal peat swamps bordering the South China Sea (2008 SAP)

		Legal and Management Status					
Name of site	Area (ha)	Protected – Non-use (Subsistence/commercial)	Sustainable use	Non-sustainable use			
Prek Kampong bay in Kampot Province	16, 250	National Park	N.A.	N.A.			
Prek Kampong Som Shanoukeville	10, 800	National Park	N.A.	N.A.			
Indonesia							
Berbak NP	162,700	yes					
SM Terusan Dalam	74,750	yes					
Way Kambas NP	130,000	yes					
Sungai Merang	150,000	yes					
Thailand							
Wetlands in Thale Noi Wildlife Non-hunting Area	45,700	Includes RAMSAR Site	N.A.	N.A.			
Phru To Daeng Wildlife Sanctuary	20,120	Wildlife Sanctuary; RAMSAR site	N.A.	N.A.			
Wetlands in Thale Sap Wildlife Non-hunting Area	36,467	Non-hunting Area		N.A.			
Phru Kan Tulee	140	N.A.		N.A.			
SUBTOTAL	646,927	564,620	82,307	0			
		Non-peat Swamps					
Cambodia		· · · · ·					
Kampong Trach in Krong Kep	7.500	National Park	N.A.	N.A.			
Prek Toek Sap	21.259	National Park	N.A.	N.A.			
Indonesia							
Tulang Bawang	86.000	Partly					
Rawa-rawa Kubu Padang							
Tikar	1,499,000	-					
Thailand							
Khao Sam Roi Yot National							
Park	9,808	National Park	N.A.	N.A.			
SUBTOTAL	1,623,567	38,567 [86,000]	0	[1,499,000]			
	<u>, , , ,</u>	Lagoons	<u> </u>				
Cambodia							
Beoung Ka Chang	4. 503	National Park & RAMSAR site	N.A.	N.A.			
China	.,						
Wenchang	218	Provincial level nature reserve	N.A.	N.A.			
Viet Nam							
Tam Giang-Cau Lagoon	21.600	N.A.	N.A.				
Tra O Lagoon	2,000	N.A.	N.A.	V			
Degi Lagoon (Binh Dinh	1.000			1			
Province)	1,600	N.A.	N.A.	N			
Thi Nai lagoon (Binh Dinh	5 000	NL A	NL A	.1			
Province)	5,000	N.A.	N.A.	N			
SUBTOTAL	34,921	4.721	0	30,200			
300101712	• .,•= .						
O angle a dia	1	Inter-tidal flats	1	Т			
Ruer Sey Stock Toul Stav	4,890	National Park	N.A.	N.A.			
China	1 / 25	Municipal loval patura recordo	ΝΑ	ΝΑ			
	1,435	Municipal level nature reserve	N.A.	N.A.			
	3,901	Revincipal level nature reverse	N.A.	N.A.			
Indenasia	000	Provincial level hature reverse	IN.A.	N.A.			
	200						
Taniung Datuk	200	yes					
	25,000	-					
Palah	3,000	yes					
Muara Kandawangan	170,340	yes					
	150,000	yes					
Pualu Rambut		yes					
Muara Angka	40	yes		+			
CA Muara Combana	∠⊃ 10.404	yes					
Philippines	10,481	yes					
Balayan Bay Tidal flats	75 000	ΝΔ	1	ΝΔ			
Manila Bay Tidal Flat	30,000	Ν.Α.	√ √	N A			
Fl Nido Palawan mudflate	54 202	Protected Seascono	ΝΔ	Ν.Λ. Ν Δ			
Thailand	54,303		IN.A.	N.A.			
Don Hoi Lot	2 400	RAMSAR Sito	ΝΔ	ΝΔ			
Don Hoi Lot 2,409 RAMSAR Site			IN.A.	N.A.			

		Legal and Management Status			
Name of site	Area (ha)	Protected – Non-use (Subsistence/commercial)	Sustainable use	Non-sustainable use	
Wetlands in Mu Koh Chang National Park	65,000	National Park	N.A.	N.A.	
Wetlands in Mu Koh Ang Thong National Park	10,200	National Park and RAMSAR Site	N.A.	N.A.	
Thung Kha Bay – Savi Bay	5,204	National Park	N.A.	N.A.	
Viet Nam					
Ca Mau Southwest Tidal Flat 6		National Park	N.A.	N.A.	
Kim Son Tidal Flat	12,620	N.A.	N.A.		
SUBTOTAL	691,859	487,323	161,712	37620	
TOTAL	4,201,145	1,787,415	282,116	[2,032,831]	

59. The agreed goal of the Strategic Action Programme for wetland management and use is to: "Promote the sustainable use of coastal wetland resources by developing integrated management plans and enhancing conservation and restoration of coastal wetlands bordering the South China Sea and the Gulf of Thailand, specifically lagoons, estuaries, mudflats, peat swamps, and non-peat swamps.". The specific targets for wetland management outlined in the Strategic Action Programme are:

- to set up or update management plans for at least three lagoons, nine estuaries, five tidal flats, one peat swamp and one non-peat swamp in the South China Sea;
- to increase by at least 7 wetland areas, the number of sites or specified wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites, etc); and
- to have a regional estuary monitoring scheme implemented in the participating countries.

60. Activities to achieve Outcome 1.4 are focused on coastal lagoons, estuaries and mudflats and aim to improve the effectiveness of national policy, legal and institutional arrangements and coordination including the needed national reforms by developing and implementing management plans for at least 3 lagoons (26,818 ha), 9 estuaries (614,680 ha), 5 tidal flats (96,903 ha), 1 peat swamp (45,700 ha) and 1 non-peat swamp (9,808 ha); declaring at least 7 wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites) including the needed management reforms and adopting a regional estuary monitoring scheme and its national implementation.

Outputs	Cambodia	China	Indonesia	Philippines	Thailand	Viet Nam	TOTAL
1.4.1 Integrated management plans developed and under implementation for at least 3 lagoons (26,818 ha), 9 estuaries (614,680 ha), 5 tidal flats (96,903 ha), 1 peat swamp (45,700 ha) and 1 non-peat swamp (9,808 ha) 1.4.2 Declaration of at least 7 wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites). 1.4.3 Adoption of a regional estuary monitoring scheme and its national implementation	Koh Kapik Ramsar, Koh Kong Province	Pearl river Beilun river Shantou Hepu Danzhou Wenchang	Sembilang	Malampaya Sound Pansipit River Estuary Manila Bay Tidal Flat	Thale Noi Wildlife Non- hunting Area Khao Sam Roi Yot National Park	Tam Giang- Cau Lagoon Thi Nai lagoon (Binh Dinh Province) Balat Estuary Tien River Estuary Dong Nai River Estuary Ca Mau Southwest Tidal Flat	19 sites
Total wetland area in the 19 target sites (ha)	12,000	14,084	387,500	54,515	55,508	264,110	787,717
Wetland category	Cambodia	China	Indonesia	Philippines	Thailand	Viet Nam	TOTAL

Table 10. Outcome 1.4 outputs, sites and targets for the management of wetlands

Outputs	Cambodia	China	Indonesia	Philippines	Thailand	Viet Nam	TOTAL
Lagoons		Wenchang - N				Tamgiang- Cauhai-N; Thi Nai-N	3
Estuaries	Koh Kapik- N	Pearl river- N; Beilun river-U	Sembilang NP-U	Malampaya sound-U; Pansipit-N		Tien River Estuary; Dong Nai-U; Balat-U	9
Tidal mudflats		Shantou-N; Hepu-N; Zhanzhou-N		Manila Bay-N		Southwest Ca Mau-U	5
Peat swamp					Thale Noi non hunting area – U		1
Non-peat swamp					Khao Sam Roi Yot National Park-U		1

61. Further, activities are planned to strengthen the Regional Working Group on Wetlands, as the regional scientific and technical advisory body on coastal wetland management; and, by establishing linkages among wetland management institutes or agencies in the region and between and within the academic and professional communities. Activities are also planned to enhance and sustain the capacity of wetland management agencies and strengthen knowledge and public awareness on the wise use of wetlands in the region. Regional training needs will also be assessed and a training programme developed that will include study tours and field visits for wetland managers, community representatives, students, and NGO members. Supporting activities further include: the production and dissemination of materials for public awareness; the development of an educational centre; the development of curricula; and the production of national newsletters. Activities directed towards improving sustainable management include: tool kits for supporting the relevant legal and institutional reforms, developing regional handbooks/manuals, and guidelines for sustainable use including restoration of estuaries and coastal lagoons; maintaining regional GIS- and meta-databases; developing and implementing a regional estuary monitoring scheme; and convening of regional meetings among countries to review the status of wetland management plans.

Outcome 1.5 National and regional level cooperation in tracking results of SAP actions for coastal habitat management

62. The South China Sea Strategic Action Programme defined indicators and results frameworks for use in monitoring and evaluating the effectiveness of SAP implementation. This component of the project aims to facilitate national and regional level cooperation in tracking results of SAP actions for coastal habitat management. Additionally, an online 'results' portal will be developed to support regional-level capacity building in results-oriented planning and management of coastal habitats, as well as the routine online sharing and syndication of SAP implementation results. The latter will involve online geospatial presentation of results linked to related initiatives of the GEF IW:LEARN and GEF LME:LEARN initiatives. Similarly, performance of this component with respect to indicators defined in the GEF IW tracking tool will be documented and communicated annually; effort will also be made to align the agreed reporting systems with national reporting regional networks of coastal habitat scientists and managers established through the SCS project. To support the uptake of best management practices, effort will be made to periodically convene meetings of habitat specialists and community leaders. Additionally, the information and data collated on the status of coastal habitats and their

management will be used to update the national reports on mangroves, coral reefs, seagrass and wetlands produced as part of Strategic Action Programme formulation.

Termination Evaluation of the "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" (2009)

Recommendation: An SAP implementation project should include further development of regional scientific and technical indicators on the environmental quality and status of the South China Sea in areas beyond coastal habitats, or apply appropriate previously existing indicators. The work initiated on nutrient carrying capacity could be extended in this regard, and other potential transboundary / regional indicators, such as those related to fisheries, could be further developed. Such indicators would facilitate a better understanding of the effects of conservation measures and management actions on the South China Sea on a basin-wide basis, reflecting the actual intent of the project, and the rationale for GEF support under the IW focal area. Using indicators, and aggregating basin-wide baseline data, would provide an improved scientific foundation for discussion of coordinated regional management. [Participating Countries]



Figure 8. SCS SAP National Committees

1.

2.

3.

Table 11. Outputs, key actions/targets and deliverables for Outcome 1.5

Outputs	Targets/Kev actions	Deliverables
1.5.1 National committees and regional networks of habitat specialists established under the SCS project revitalized and functioning	 Six Committees established for each country (total of 36 committees) chaired by the relevant SEA Focal Point and including technical experts, (10-20), and all relevant stakeholders including community organizations, non-governmental organizations etc. Including all relevant stakeholders including community organizations, non-governmental organizations etc. To meet every six months to guide national activities To ensure all relevant institutions and experts contribute to execution of all national actions 	 Six monthly reports Site specific execution and reports on progress and best-practices Contribution to the updating of National Reports Support the compilation of monitoring and data of sites (mangroves, seagrass
1.5.2 Mechanism to monitor and evaluate the impacts of SAP implementation and achievement of habitat targets operational [including agreement on standardized methods and guidelines for inventory and assessment]	 Based on existing results frameworks for the management of mangroves, coral reefs, seagrass and wetlands of the SCS, develop methodology for the development of a "SAP Progress and status report" Review current SAP results framework and if needed revise indicators to ensure alignment with national and regional indicator sets as well as global processes and their indicators as appropriate (SDGs, CBD etc). Consider also work of Regional Seas in common targets and indicators (reports available) and the work of the IW:LEARN Data and Information management group Propose updated set of SAP indicators for habitats to then be further reviewed as part of the revision of the SAP Establish synergies with other SAP implementation (i.e. ATSEA 2) 	 Information data gather on agreed indicators for SAP monitoring Database of information and data for integration into report in SAP implementation (output 1.5.4) Led by National Committees and NTWG's under guidance of the PCU and RSTC
1.5.3 Community leaders and local government from priority habitat sites networked via national and regional round-table meetings to foster cooperation and knowledge	 Develop workplan of regional round table meetings and training to share best practices. Build on CBO's in the region (i.e. with COBSEA, PEMSEA and SGP) Identify key local community leaders and local government officials contacts and "spokespersons" to be engaged throughout project. Series of national roundtables to engage local communities in all project activities 	Meeting reports of round-table meetings (including records of joint management decisions and participant lists) Annual reports of best practice examples of community-led SAP implementation

Outputs	Targets/Key actions	Deliverables
sharing on achievements and best practices	• Execute regional training and exchange of best- practices meetings at regional level based on SAP priorities identified (no of regional trainings)	
1.5.4 Progress and status report of regional and national SAP implementation	National Committees and NTWG's to contribute data/information on the status of SAP Implementation as of 2021	Published Report, widely disseminated

COMPONENT 2. STRENGTHENING KNOWLEDGE-BASED ACTION PLANNING FOR THE MANAGEMENT OF COASTAL HABITATS AND LAND-BASED POLLUTION TO REDUCE ENVIRONMENTAL DEGRADATION OF THE SOUTH CHINA SEA

63. This component will result in: an enhanced information-base for coastal habitat management and action planning; effective integration of regional science in the management of land-based pollution; strengthened and harmonized national policies and laws, and supporting financial mechanism, for the management of land-based sources of pollution; improved national and regional values for the economic evaluation of coastal habitats for use in development planning and decisionmaking; regionally appropriate tools and mechanisms to guide the development of sustainable management systems for coastal habitats and land-based pollution; and an updated and Ministerially adopted Transboundary Diagnostic Analysis and Strategic Action Programme, including prioritization of national management actions to address climate variability and change. Each of the outcomes to be delivered via Component 2 of the project are outlined below.

Outcome 2.1 Enhanced information-base for coastal habitat management, monitoring and action planning

64. The science-based planning for coastal habitat management fostered by the SCS project relied on the extensive compilation, review and analysis of information and data relating to specific habitat sites. This involved the development of comparable national data and information sets relating to, inter alia, the distribution and diversity of coastal habitats, the species richness and hotspots of biodiversity, present threats and the status of management. Much of this information was synthesised and published as the national reports on coastal habitats that provides a permanent record of the information used as the basis for planning. These national reports will be updated in the SCS SAP project as well as site characterizations. These regional activities aim to support the national level activities in ensuring most up to date approaches and scientific information will be included.

65. These enhancements to the information-base for coastal habitat management and action planning will be used to guide the preparation of updated National Reports, the National Action Plans, as well as the revised TDA and SAP.

Outputs	Targets/Key actions	Deliverables
2.1.1. Validation of existing or improved algorithms with on-site data	 Support site activities and ensure latest remote sensing algorithms and tools to provide data on coastal site Create partnerships with initiatives and projects leading innovation on remote sensing (i.e. with GRID, WCMC, latest research) Training and support to national teams 	 Regional report on methodologies and procedures for the application of aerial visual survey and remotely sensed data in coastal habitat management in the SCS marine basin published and accessible online Training/Workshop

Table	12.	Outputs,	key	actions/targets	and	deliverables for	Outcome 2.1.
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Outputs	Targets/Key actions	Deliverables
2.1.2 Mechanism for collection and exchange of regional coastal habitat and pollution information and data established	 Regional coordination to ensure all Component 1 site activities collection of data are integrated into a regional meta-database GIS and meta-database of SCS coastal habitat information Partnerships with national regional organizations to coordinate information and data (i.e. COBSEA, PEMSEA) Partnership with IW:LEARN Data and Information (DIM) working group and synergies with other LMEs, as well as links to SDG reporting 	 Agreed site characterisation forms for the compilation of regionally comparable coastal habitat information and data GIS and meta-database online and routinely updated by SAP implementation partners
2.1.3 Role of coastal habitats of the South China Sea in climate change adaptation and the sequestration and storage of carbon	 Review of approaches and data available to assess role of habitats in capture and storage of habitats and potential partnerships (i.e. Global Blue Forests project, UNEP Blue Carbon Initiative) Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats 	 Published report on the capture and storage of carbon by coastal habitats, including national and regional strategic planning recommendations, shared online Volume of CO2 captured and stored by SCS habitats defined Extent of uptake of information on carbon sequestration and storage used in mgmt. planning
2.1.4 Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats of the South China Sea	 Methodology to integrate climate change aspects into TDA and SAP 	 Review report published and shared regionally Communications on review outcomes published by media outlets and syndicated via LME LEARN
 2.1.5. Review of current status of habitat and pollution data available in the SCS, gaps and challenges and innovative technology and approaches to monitoring and assessments that can support SCS monitoring programme 2.1.6 A regional system for periodic monitoring of the state of coastal habitats of the South China Sea 	 Assess current status of habitat and pollution data available in the SCS. Analysis and mapping of each countries monitoring programmes, identifying elements towards a regional mechanism for monitoring and reporting on the marine and coastal environment (in partnership with regional organizations) Also review harmonization of joint reporting to other commitments (SDGS, CBD etc.) Countries (6) contribute to compiled metadatabase on existing data No of recommendations and innovative approaches to support monitoring and assessments 	 Review assessment report with contribution from all countries Proposal and recommendations on sustainable solution to support monitoring and assessments (to be integrated in SAP)

Outcome 2.2 Effective integration of regional science in the management of land-based pollution

66. The South China Sea TDA and SAP identified pollution from land-based sources in particular inadequate waste-water treatment as a key issues, along with inadequate standards and lack of capacity to monitor, regulate and control pollution discharges. High concentrations of suspended solids largely result from poor land-use practices, including logging activities and conversion of forests in upland areas. On the other hand, high nutrient loads mainly result from untreated domestic wastes that are directly discharged into the receiving water bodies. Both contaminants impact the ecological functioning of coastal ecosystems. In addition, heavy metals such mercury (Hg), Arsenic (As) and lead (Pb) have tended to increase in both biota and sediments in coastal waters of the South China Sea during the last decade. These heavy metals have potential negative impact on the health of marine living resources and humans who consume seafood products.

67. A total of 17 pollution hot spots were characterised in formulation of the land-based pollution component Strategic Action Programme. It was identified that that present pollutant and contaminant discharges may have transboundary consequences in some of the identified "hot spots" and sensitive areas in terms of increasing the rate of habitat degradation in those coastal ecosystems. Accordingly, it was identified during SAP formulation that the purpose of SAP activities relating to land-based pollution is not to finance interventions that directly reduce the load of contaminants reaching the marine environment from land-based sources but to support the integration of regional science with national-level policy making and planning for the management of land-based pollution. Accordingly, the over-arching goal of the land-based pollution component of the SAP was agreed as follows:

"To foster regional co-operation in the identification of sensitive ecosystems, land-based contamination problems, evaluation of their significance and development of standards for national level adoption within a regional context in order to develop an appropriate precautionary approach to discharges to the South China Sea marine basin"

68. It was further agreed that the purpose of the related targets was to set and periodically review region-wide water quality standards and water quality objectives which will assist in maintaining the health of the coastal ecosystems of the South China Sea marine basin. The specific targets are to:

- 1. estimate total contaminant loading to the South China Sea;
- 2. agree and adopt regional criteria for contaminants in sediment and biota;
- 3. characterise and prioritise all hot spots surrounding the South China Sea;
- 4. review and prepare recommendations for application in amending national/provincial, legislation/regulations in support of all Land-based Pollution targets of the SAP; and
- 5. to meet ASEAN seawater quality (14 parameters) criteria (except pollutants from scientifically identified natural sources, if any) for:

69. Activities of Component 2 will result in estimates of total contaminant loading and carrying capacity of the SCS via application of quantitative modeling and GIS-based techniques for seven heavy metals (Hg, Cd, Pb, Cu, Cr, As, Zn). This builds on work of the SAP formulation project to model the carrying capacity of the South China Sea marine basin with respect to nutrients. The project will expand on this modeling via an activity to quantify the impacts of estimated heavy metal contaminant loadings for use in national and regional planning. Methodologies and procedures will also be established through the project for the characterization of heavy metal pollution hotpots, including the conduct of diagnostic analyses to identify priority actions to remediate environmental compromises at these locations. Innovatively, this work will be replicated during the project cycle to quantify effluent volumes and contaminant loadings from coastal aquaculture operations.

Outputs	Targets/Key actions	Deliverables
2.2.1 Updating the	• Building upon SCS project nutrient	• Nutrient carrying capacity developed and implemented
model for the SCS marine basin and integration into SCS GIS	Global Nutrient Project (pilot project in Manila Bay and Laguna de Bay), replicate exercise in key areas/hotspots	 Communications products available for regional and global sharing 1 * IW Experience Note
2.2.2. Regional level assessment of impacts of key contaminants (nutrients, heavy metals, oil, litter) and national or local assessments based on NAP and hotspots	 Complementing the work of the National Report and NAP update (see output 2.6.5) on land-based pollution; Overview of existing data and models on key contaminants, building on existing initiatives. Fully integrate all new national and regional research Review commitments to Global and regional obligations with regards to pollution and provide recommendations 	 Published report shared nationally and regionally Pollution hotspot site characterization templates developed Hotspot information accessible online Science-Policy Interface and development of policy briefs and recommendations 1 * IW Experience Note

Table 13. Outputs, key actions/targets and deliverables for Outcome 2.2.

Outputs	Targets/Key actions	Deliverables
	• Regional Report as contribution to TDA and SAP revision	
2.1.3. Quantification of effluent volumes and contaminant loadings from coastal aquaculture to the SCS marine basin	 Effluent from aquaculture and mariculture operations identified as key threat to dominant coastal biomes Quantification of effluent volumes and contaminant loadings from coastal aquaculture 	Number of aquaculture sites for which effluent and contaminant loadings estimated Published methodology and procedures for estimating aquaculture pollution loadings and impacts 1 * IW Experience Note

Outcome 2.3 Strengthened and harmonized national policies and laws, and supporting financial mechanism, for the management of habitats and land-based sources of pollution

70. Each of the participating countries have environmental laws or acts under which environmental standards are in place with mechanisms for approved enforcement procedures to ensure compliance. In order to meet with standards and regulations stipulated under the law, structural facilities like waste water treatment plants are one way to treat waste water before discharging it to the environment. In addition to enforcement of existing laws and regulations only and building treatment facilities, environment planning, a part of the development process may prevent and mitigate potential impacts. In line with this, most countries in the region have Environmental Impact Assessment (EIA) prior to development. Countries are also working on environmental awareness, communication and education to enhance public understanding of pollution problem and practices at the individual level that may reduce contaminant loads to the environment. In addition, monitoring of pollution sites and water quality is currently undertaken by all countries while some countries include monitoring programmes for sediment quality and bio-parameters as well. National level activities will support the review of legislative and institutional frameworks for land-based pollution management and habitat management in participating countries and revision of national/provincial policies; revision of national/provincial policies; development, enactment and implementation of supporting regulations for land-based pollution, in close cooperation with regional partners.

Outputs	Targets/Key actions	Deliverables
2.3.1. National best practices in waste water management, law enforcement, and community and industry participation in managing land-based sources of pollution and habitat management documented and shared	 Building upon lesson learned in community- based wastewater mgmt. in Batam, Indonesia and work of PEMSEA and COBSEA Agree on mechanism to fully share National best practices and contribute to regional and global platforms Review best practices also related to work on Blue/Green and circular economy initiatives and Sustainable Consumption and Production Number of best practice technologies and measures tested, documented and shared. Including how these will contribute to the SDGs 	• Catalogue of best practice technologies and management approaches for land-based pollution published and accessible online
2.3.2 Review of legislative and institutional frameworks for land-based pollution and habitat management in participating countries	 National level review as part of the NAPs, under coordination of the IMC Regional Review of legislative and institutional frameworks for land-based pollution and habitat management Identification of gaps and needed reforms Undate on gaps and needs for SOPs in line 	 Review published and shared regionally Gaps identified and institutional, policy reforms identified (see output 2.3.3) Regional guidelines on
national Standard Operating Procedures for	 Opeale of gaps and needs for SOPs in line with regional and global agreements No of SOPs developed and adopted 	Kegional guidelines on Standard Operating Procedures published

Table 14. Outputs, key actions/targets and deliverables for Outcome 2.3

Outputs	Targets/Key actions	Deliverables
land-based pollution control and management [including agreed sediment, biota, & water quality criteria]		• Adopted National Standard Operating Procedures available online
2.3.4. Revised national/provincial policies and supporting regulations for land-based pollution and habitats developed, enacted and implemented	 Support to countries to update/develop new national/provincial policies and supporting regulations for land-based pollution and habitats Reflect gaps, reforms and other recommendations into revised NAPs and SAP 	 6 national reports on policy and legal aspects of land-based pollution management Endorsed policy and executive orders, provincial/local ordinances and by-laws

Outcome 2.4 Updated Total Economic Values of coastal habitats for use in development planning and decision-making and blue economy

71. Economic valuation is defined as the attempt to assign quantitative or monetary values to the goods and services provided by environmental resources, whether or not market prices are available to assist in the process. The National Research Council defines economic valuation as an attempt to provide an empirical account of the value of the services and amenities or of the benefits and costs of proposed action (project or policies) that would modify the flow of services and amenities. Both definitions are in agreement regarding the quantification of goods and services that provide information about the environmental resources. "Valuing" an ecosystem is essentially valuing the characteristics of a system. Costanza⁶ et al. (1997) have made a comprehensive list of ecosystem functions and services and defined ecosystem services as "flows of materials, energy and information from natural capital stocks which combine with manufactured and human capital services to produce human welfare". The concept of Total Economic Value (TEV) provides a framework for valuing natural; systems and is used to identify and estimate the monetary value of all economic benefits that a society derives from a particular ecosystem. Whilst the South China Sea SAP formulation resulted in advancements in the determination of national and regionally applicable TEVs that were used to value the cost of action versus non-action within the framework of SAP implementation, the values determined through the previous SCS project are incomplete since not all known goods or services from individual coastal ecosystems have been valued. One area of current weakness is that comparatively few existing values for the service provided by habitats as nursery areas for off-shore fish and crustaceans are included. This is known to be a significant and major service provided by mangrove and seagrass habitats and work will be undertaken to establish the economic values of these services.

72. Since this work was conducted, new approaches have been applied through several initiatives including the <u>Economics of Ecosystems and Biodiversity</u> (TEEB), the UNEP GEF <u>Blue Forests project</u>, as well as through the UN Regular Process and World Ocean Assessment Reports. Also, since the 2008 SAP, greater focus has been given on blue/green and circular economy approaches to ensure effective management of marine and coastal resources, and this is becoming an important priority in the region.

⁶ Costanza, R., d'Arge, R. de Groot, R., Farber, S., Grasso, M., Hannon, B. Limburg, K., Naeem, S., O'Neill, R.B., Paruelo, J., Raskin, R.G., Sutton, P. and van den Belt, M. (1997). The Value of the world's ecosystem services and natural capital. Nature 387 (6630) 253-260

Outputs	Targets/Key actions	Deliverables
2.4.1 Expanded datasets and estimates of economic valuation information on the goods and services of SCS coastal habitats	 Review/revise economic evaluation methodology in consideration of new approaches Implement and update Economic Values of coastal habitats data for inclusion in revised SAP 	 Published methodology National/Regional report with economic evaluation integrated into SAP
2.4.2. Compilation of good examples, and identify recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management	 Partnerships established with key regional organizations (PEMSEA, COBSEA, ASEAN) on current status, gaps and needs for enhancing blue and circular economy in the region Compilation of good examples from within and beyond the region where relevant Recommendations on actions to further support SAP implementation 	 Report on good examples, and recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management SAP revision incorporated blue and circular economy

Table 15. Outputs, key actions/targets and deliverables for Outcome 2.4

Outcome 2.5 Regionally appropriate tools and mechanisms to guide the development of sustainable management systems for coastal habitats and land-based pollution

73. This outcome will support the project through the development of an online catalogue of best practices and their dissemination with government officials and communities through a program of training and exchange visits with the establishment and operation of web-based 'SCS Network' to strengthen cross-sectoral and multi-lateral communication and knowledge management and a programme of study tours and exchanges aimed at government officials, community leaders, and habitat and pollution managers. More recent experiences in nature-based solutions and the good practices from the UN Decade on Ecosystem Restoration will be given particular attention

Outputs	Targets/Key actions	Deliverables
2.5.1. Online catalogue of best practice management measures and technologies for sustainable use of SCS coastal habitats and land-based pollution management	 Compilation of regional best-practices (from SCS project and other initiatives) Best practices on innovative management approaches and nature based solutions Coordination with national NTWG and Committees to document best practices for site activities Updated best-practices online 	 Catalogue of best practices accessible online Communications products on best practices produced and syndicated online
2.5.2 Government officials, community leaders, and habitat and pollution managers exposed to on-going practices in rehabilitation, management, and pollution control and treatment via programme of training, study tours and exchange	 In partnership with existing networks (i.e. PEMSEA Network of Local Governments for Sustainable Coastal Development), develop program of training, study tour and exchange initiatives; Implement training, study tour and exchange initiatives in all countries 	 Reports of study tour and exchange initiatives Annual reports of best practice examples of community level inputs to SAP implementation initiatives

Table	16.	Outputs.	kev	actions/	targets	and	deliverables	for	Outcome 2.5
Lanc	TO.	Outputs,	ncy	actions	un scus	anu	uchiverables	101	Outcome 2.5

Outcome 2.6 Updated and Ministerially adopted Transboundary Diagnostic Analysis and Strategic Action Programme, including prioritization of national management actions to address climate variability and change

74. Activities to undertake a more contemporary Transboundary Diagnostic Analysis for the SCS basin, and linked actions to prepare an updated Strategic Action Programme for the SCS, will draw on information generated throughout the project under Components 1 and 2, as well as integrated results for regional institutions initiatives and projects (in particular COBSEA and PEMSEA). Given the previous SAP was adopted in 2008, a number of additional aspects will be included in the methodology based on the <u>TDA/SAP Methodology</u>, and climate change aspects as well as other emerging issues. The SAP will also consider in its plan for implementation how it contributes to the relevant SDG Goals and Targets as mentioned in this document, and the targets of the new CBD Post 2020 Framework.

Outputs	Targets/Key actions	Deliverables
2.6.1 National and regional level consensus on contemporary issues and problems, including the quantification of environmental compromises and the prioritization of problems and updated TDA	 TDA for SCS published in 2000. Methodology developed for National Report and TDA update based on latest IWLEARN guidelines, and including preliminary information on climate change and other emerging issues such as marine litter (through COBSEA's RAPMALI) TDA drafted for review by RSTC and regional working groups, as well as peer review process TDA adopted at Steering Committee and presentation to COBSEA's IGM 	Updated and regionally endorsed Transboundary Diagnostic Analysis for the SCS marine basin published and disseminated at national and regional levels
2.6.2. SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD)	 Methodology/Guidelines for update od national habitat reports Partnership with key regional institutions and projects to combine resources and information Update of national habitat reports Regional synthsize/ SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD) 	Published state of coastal habitat reports
2.6.3 National and regional consultative process to develop updated Strategic Action Programme SAP for adoption at the Ministerial level (Yr 5) including agreed monitoring and reporting mechanisms	 Methodology developed for NAPs and SAP update based on latest IWLEARN guidelines, and including preliminary information on climate change, marine litter and other emerging issues Incorporation of additional elements (depending on information availability) including blue and circular economy and nature-based solutions SAP drafted for review by RSTC and regional working groups, as well as peer review process SAP adopted at Steering Committee and presentation to COBSEA's IGM SAP monitoring framework Contribution assessed of SAP implementation to the SDGs and CBD Post 2020 Framework 	 Adoption by appropriate Ministers of an updated Strategic Action Programme for the South China Sea Endorsed Strategic Action Programme published
2.6.4 Prioritization of national management actions for incorporation into national policies and plans, in particular for climate variability and change and blue economy	• Recommendations and project concepts for SAP implementation including regional level implementation, incorporation into national planning (financial mechanisms addressed in outcome 3.3)	• Recommendations, actions and project concepts for SAP implementation

Outputs	Targets/Key actions	Deliverables
2.6.5 Updated and adopted National Action Plans for mangroves, coral reefs, seagrass and wetlands, and land-based pollution including enactment of supporting legislation where required	 Linked with 2.6.2 Methodology developed for NAP update including preliminary information on climate change, marine litter and other emerging issues Incorporation of additional elements (depending on information availability) including blue and circular economy and nature-based solutions 	Adopted National Action Plans and sustainable financing strategies accessible online

COMPONENT 3. FACILITATING REGIONAL AND NATIONAL LEVEL INTEGRATION AND COOPERATION FOR IMPLEMENTATION OF THE SOUTH CHINA SEA STRATEGIC ACTION PROGRAMME

75. This component will result in: regional and sub-regional co-operation in the integration of scientific knowledge and research outputs with management and policy making; capacity for civil society and community organization participation in SAP implementation strengthened via operational partnership with GEF SGP; relationships between central and local governments and the private sector strengthened and formalized; revitalization of regional mechanisms for communications, knowledge exchange, and information and data management and sharing; and agreed arrangements for strengthened regional cooperation in the management of the marine and coastal environment of the South China Sea. Each of the outcomes to be delivered via Component 3 of the project are outlined below.

Outcome 3.1 Regional and sub-regional co-operation in the integration of scientific knowledge and research outputs with management and policy making

76. Regional and sub-regional co-operation in the integration of scientific knowledge and research outputs with management and policy making is an essential component of SAP implementation, and will be supported through the regional working groups and in particular by the Regional Scientific and Technical Committee that will act as a source of independent scientific and technical advice to policymakers. To support the uptake of regionally accumulated scientific knowledge in policy-making and planning, the project will facilitate exchanges between government and the scientific community via biennial Regional Scientific Conferences. This will be complemented via the development and operation of a network of local government officials and operational level managers, including annual Mayors' Round-table meetings, to share experiences and best practices in the application of science in the management of coastal habitats and land-based pollution. A further expected outcome of this component is sub-regional cooperation in the integration of scientific knowledge and research outputs in two priority transboundary areas. The latter builds on a key innovation of the SCS project involving the generation of bilateral cooperation between Cambodia and Viet Nam which led to the signing of a Memorandum of Understanding between the Provincial Governors of Kampot (Cambodia) and Kien Giang (Viet Nam) (which was subsequently formalized by the central governments of these countries) for the joint management of the environment and coastal resources of their shared transboundary water area. Activities under this component will strengthen this formal transboundary cooperation and facilitate its replication in an additional two transboundary areas. This component will establish mechanisms for the capture and exchange of best practices and lessons learned from the related UNEP/GEF fisheries refugia management project. Activities will also be implemented to ensure that these best practices and lessons learned be used to inform the update of the Strategic Action Programme for the South China Sea and the National Action Plans for coastal habitats and land-based pollution management to be undertaken as part of this SAP implementation project. As part of best practice and lessons learned exchange, this component will also establish an operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry.

Outputs	Targets/Key actions	Deliverables
3.1.1 Regional Scientific and Technical Committee of the SCS project functioning as a bridge between the scientific community and decision- makers [annual meetings]	 Establishment of the RSTC, including the Chairpersons of the National Technical Working Groups (NTWGs); the Chairpersons of the Regional Working Groups (RWGs) and Regional Task Forces (RTFs); selected regional experts; and the SCS-SAP PCU Project Coordinator Annual Meetings of the RSTC and additional ad-hoc online meeting as requested Oversight of the scientific and technical elements of the project, providing sound scientific and technical advice 	 RSTC Terms of Reference Annual meeting reports (documenting scientific and technical advice and participant lists)
3.1.2 Knowledge exchanges between government and scientific community through biennial Regional Scientific Conferences	Biennial Regional Scientific Conferences	 Published reports of the Regional Scientific Conferences Report on the uptake and use of regionally accumulated science
3.1.3 Best practice exchanges between local government officials and coastal managers on science-based management via annual Mayor's Round-Table meetings	 Number of Mayor's Round-Table meetings convened Number, scope & reach of communications to raise local official awareness of best practices 	Reports of Mayor's Round-Table Meetings, including documented evidence of behaviour change as a result of exposure to best practice guidance
3.1.4 Memoranda of Agreement for joint management of 2 priority transboundary water areas agreed & implemented	Bilateral cooperation for transboundary resource management between (a) Cambodia and Vietnam and (b) Cambodia and Thailand Status of signature of Memoranda of Agreement	Signed Memoranda of Agreement outlining agreed joint actions for transboundary coastal resource management
3.1.5 Cooperation with the GEF fisheries refugia project and other relevant regional initiatives	 Promote joint actions at the national level between SCS SAP and FR Ensure FR Focal Points participate in National meetings Coordinate inputs from the FR into the revised TDA and SAP 	Reports of joint planning meeting Published revised NAPs and SAP containing section on lessons from fisheries refugia project
3.1.6 Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry [annual]	 Design and implement Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry Ensure best-practices published, and opportunities for key responsible persons to travel to regional and/global forum's and meetings to present their best-practices 	Documented examples of innovation and best practice by communities, local governments and industry Annual report of award project

Table 18. Outputs, key actions/targets and deliverables for Outcome 3.1

Outcome 3.2 Capacity for civil society and community organization participation in SAP implementation strengthened via operational partnership with GEF SGP

77. In September 2008, UNDP and UNEP entered into a partnership agreement to support the implementation of the Regional Strategic Action Programme (SAP) in the South China Sea, implemented through the Global Environment Facility Small Grants Programme (GEF SGP). This partnership agreement was built upon a Joint Communiqué between the UNEP/GEF South China Sea Project, entitled "Reversing Environmental Degradation Trends in the South Chinas Sea and the Gulf of Thailand" (hereafter referred to as the UNEP/GEF South China Sea Project) and GEF SGP to support the SAP implementation in the South China Sea. Under the partnership agreement between UNDP and UNEP, a total funding of US\$667,800 was provided through the UNEP/GEF South China Sea Project in support of the SAP implementation.

Previous SCS Small Grants Projects (2009-2012)

Cambodia

- Sea grass resources protection and conservation project
- Mangrove Resource Conservation and Coastal Environment Protection to Enhancing Local Community Livelihoods
- Strengthening Community Based Natural Resources and Environmental Management project onesia

Indonesia

- The Utilization of Marine Ornamental Fish and The Development of Livelihood Through Community Income Alternative Within Habitat Conservation and Rehabilitation Framework
- The Improvement of Community Economy Through The Development of Ecological-Based Livelihood To Promote Responsible Marine Resource Utilization
- The Batam- Eco Trade Social Entrepreneurship "Changing Exploitation to Sustainable Extraction"
- Conserving and Increasing Tarsius Bancanus Saltator Population Through Rehabilitation Of Habitat and Ecosystem While Strengthening Community Understanding and Involvement In Conservation Effort.
- Saving the Genuine Mangrove Forest in Selat Nasik Island as a Mangrove Education and Information Centre and in the same time increase the Welfare of the Local Community in Adaptation to Climate Change

Philippines

- Conservation and protection of Bulaklakin Reef Fish Sanctuary Anak ng Dagat ng Bucana, Inc. (Barangay Bucana, Ternate, Cavite, Phil.)
- Mangrove Nursery Establishment, Mangrove Reforestation and Improvement of Existing Fish Sanctuary -Samahan at Ugnayan sa Pangisdaan ng Orion (Orion, Bataan, Phil.)

Thailand

- Collective Management and Conservation of Coastal Resources of Trad Province
- Conserving and Planning Sustainable Use of Coastal Resources, Chanthaburi Province
- Building Network for Conservation of Ao Baan Don, Surathani Province

Vietnam

- Community-based conservation and sustainable harvesting of land crab of Cu Lao Cham, Quang Nam
- Rehabilitation and conservation of nypa palms at Cam Thanh Commune, Hoi An City, Quang Nam
- Contributing to the development of a network of community-based marine protected areas in Tam Ging Cau Hailagoon
- Giang Cau Hai lagoon

78. Outcome 3.2 will build on the intra-country and inter-country consultation and cooperation fostered by the SCS project via efforts to strengthen civil society and community organization engagement in SAP implementation and revision. Specifically, capacity for civil society and community organization participation in SAP implementation will be strengthened via an operational partnership with GEF SGP. An additional package of SGP projects will also developed to support implementation of the revised SAP. The SGP project proponents, to be engaged in supporting community-based actions

at the priority mangrove, coral reef, seagrass and coral reef sites being brought under management through Component 1, will benefit from technical support by the Specialized Executing Agencies leading the national packages of habitat management interventions, as well as monitoring and evaluation support from the National Technical Working Groups.

Outputs	Targets/Key actions	Deliverables
3.2.1 Cooperation with GEF SGP in the commissioning and implementation of an additional 12 community-based projects for SAP implementation	Number of GEF Small Grants Programme projects commissioned and implemented in support of SAP implementation	Annual reports of SGP-SAP implementation partnership
3.2.2 CSO & CO inputs elicited for planning and M&E of the SCS-SGP partnership via annual NGO forums	NGO forums convened to engage SGP projects	Reports of NGO forum meetings
3.2.3 Training program on science and management of SCS coastal habitats and resources for SGP proponents	Number of SGP proponents trained to implement local actions in support of the achievement of SAP targets	Training modules for SGP proponents developed and accessible online

Table	19.	Outputs ,	key	actions/targets	and	deliverables	for	Outcome 3.2

Outcome 3.3 Relationships between central and local governments and the private sector strengthened and formalized

In order to ensure sustainability and implementation of the updated SAP and NAPs, financial 79. mechanisms need to be fully elaborated, through national implementation, donor funding and in particular private-public partnerships. It is recognized that in order to achieve these partnerships need to be established throughout the project execution. A consultative approach to identifying opportunities for private sector investment will be adopted, including national and regional investment forums to facilitate cooperation with the private sector and donors on investment in the implementation of the revised SAP. Significant commercial enterprise is conducted in waters of the South China Sea, particularly in the areas of oil and gas, fisheries and tourism. While many private sector oganisations operate corporate social and environmental responsibility programmes, these are rarely aligned with coastal and marine environmental management. Accordingly, supporting activities will be implemented to review past and ongoing public-private partnerships for coastal management in SCS region and identify opportunities for private sector investment (e.g. oil and gas, fisheries, tourism) in implementation of the updated SAP. These preparatory activities will feed into the abovementioned partnership forums to facilitate cooperation with the private sector on implementation of the updated SAP.

Outputs	Targets/Key actions	Deliverables
3.3.1 Review of past and ongoing public-private partnerships for coastal management in SCS region and case studies for effective private sector engagement	 Partnerships established with regional organizations (PEMSEA and COBSEA) and private sector Number of public-private partnerships identified and documented 	• Review of report on public- private partnerships published
3.3.2 Identification of opportunities for private sector investment (e.g. oil and gas, fisheries, tourism) in implementation of the updated SAP	Through partnerships, opportunities for private sector investment in SAP implementation identified with the support of national partners and the National Investment Plans (output 3.3.4)	Letters of commitment from private sector entities with regards to support for SAP implementation

Table 20. Ou	tputs, key	actions/targets and	deliverables for	Outcome 3.3
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Outputs	Targets/Key actions	Deliverables
3.3.3 Two partnership forums to facilitate cooperation with private sector on implementation of the updated SAP	Identified partners attend partnership forums to facilitate cooperation with private sector on implementation of the updated SAP	Reports of the partnership forums No of recommendations and agreements
3.3.4. Updated and adopted National Investment Plans for land-based pollution and habitat management in the SCS [Yr 5]	To support implementation of the revised NAPs, funding required and investment opportunities elaborated	6 endorsed National Investment Plans published and disseminated nationally and regionally
3.3.5. Regional financial mechanism for land-based pollution and habitat management [Yr 5]	Regional financial mechanism for land- based pollution and habitat management developed to ensure revised SAP funding requirements are assessed, costed and national and regional financing mechanisms are outlined	Endorsed regional report on sustainable financing of regional actions for land-based pollution and habitats in the SCS

Outcome 3.4 Revitalization of regional mechanisms for communications, knowledge exchange, and information and data management and sharing

80. The component will also revitalize and strengthen regional mechanisms for communications, knowledge exchange, and information and data management and sharing. This will involve the implementation of a communications strategy for the delivery of targeted messaging to national level stakeholders, regional supporting organizations and projects, and donors on the results of SAP implementation and related efforts in strengthening regional cooperation. This component also includes the sustained operation of the SCS project web portal and associated regional databases, which will also be linked to IW-Learn and other GEF Knowledge management systems. Active engagement with GEF IW:LEARN including participation in IW conferences and experience notes, will also be fostered. Project activities will also result in a number of publications.

Outputs	Targets/Key actions	Deliverables
3.4.1 A variety of multi-media information and knowledge products based on SCS SAP implementation communications strategy	Number of multi-media and knowledge products produced	Multi-media information and knowledge products published and accessible online
3.4.2 Regionally appropriate knowledge tools developed to support decision-making and planning	Status of knowledge tool development to support evidence- based coastal and marine management and spatial planning	Published synthesis reports on: climate variability in coastal systems; hazards and coastal area planning; blue forests and livelihoods; and land and marine tenure and use designation
3.4.3 The SCS project web portal and clearing house mechanism and associated regional databases online, updated and linked to IW-Learn and other GEF Knowledge management systems	Number of users, volume of content accessed, and online visibility of the SCS website and associated databases	Regional and national portals, GIS and meta-databses, repository of best practices, lessons learned and results accessible online
3.4.4 Active engagement with GEF IW:LEARN [1% of project resources] including participation in IW conferences and 3 experience notes	Number of IW:LEARN experience notes published	Published experience notes

Table 21. Outputs, key actions/targets and deliverables for Outcome 3.4

Outcome 3.5 Agreed arrangements for strengthened regional cooperation in the management of the marine and coastal environment of the South China Sea

Activities in support of the achievement of Outcome 3.5 involve the review and assessment of 81. regional and national institutional frameworks and the formulation of appropriate recommendations for strengthened regional coordination in the implementation of the SAP for the management of the marine and coastal environment of the South China Sea that fosters the wise use of natural, human and financial resources whilst conforming to the ethos and culture of the region. Supporting activities include: biannual meetings of the Regional Task Force on Legal Matters to review the proposed policy, legal and institutional strengthening recommendations in support of SAP implementation; the establishment and operation of National Working Groups on matters to be decided by the countries to support national and provincial level discussion and agreement on policy, legal and institutional reforms; and reviews and evaluation of existing arrangements for cooperation. The activities undertaken in this subcomponent will be the direct responsibility of a Regional Task Force on Legal matters (RTF-L) that will execute the relevant regional activities working in close consultation with National Working Groups on Legal Matters (NWG-L) established in each country. The NWG-L shall have responsibility for executing the national level actions. Activities under this sub-component are intended to lead to the adoption of stronger, long-lasting and more formal arrangements for regional co-operation in the management of the marine and coastal environment of the South China Sea including the long-term implementation of the SAP, embedded within COBSEA.

Outputs	Targets/Key actions	Deliverables
3.5.1 Biannual meetings of the Regional Task Force on Legal Matters	Regional Task Force meetings to develop workplan towards the development of a proposed regional instrument to be discussed at the 2 nd Steering Committee, and then to ensure coordination on its development	Reports of the meetings of the Regional Task Force on Legal Matters
3.5.2 National Working Groups on established and functional	National Working Groups on Legal Matters (NWG-L) established and regular meetings conducted	Reports of the meetings of National Working Groups
3.5.3 Process for development of a proposed arrangement for regional cooperation defined and planned	Proposal developed and discussed at the Steering Commitee	Report outlining agreed process
3.5.4 National stakeholder inputs to drafting of instrument for strengthened regional cooperation facilitated via national consultations	Through the NTWG-L stakeholder input to drafting phase of instrument for cooperation	Reports of national stakeholder consultation process
3.5.5 Adopted instrument for strengthened regional cooperation	Status of adoption of the instrument	Adopted instrument

Table 22. Outputs, key actions/targets and deliverables for Outcome 3.5

5. STAKEHOLDER INVOLVEMENT

82. The SCS SAP implementation is supported through the work of several organizations at the regional level as well as a number of key national level projects and initiatives (see Section 2.5). The project will ensure ongoing coordination and partnerships with all relevant projects and initiatives. The project will be implemented in six countries. Activities to be implemented in each country will further determine the particular stakeholders to be consulted, and are elaborated in the National Implementation Reports. The structure of regional and national level committees and working groups will ensure full engagement of activities during implementation (see Section 3).

5.1 REGIONAL AND GLOBAL STAKEHOLDERS

83. Stakeholders can be divided according to their role in the project's activities (see **Figure 9**) and some of the main stakeholders are indicated in **Table 23**, to be updated following the Inception Workshop if appropriate. Some of the **main partnerships at the regional level**, and their indicative role in the project are summarized in **Tables 24**.

Figure 9 The various roles of stakeholders



A-High power, /high interest over the project= Key player

B-High power/ low interest over the project =Meet their needs

C-Low power/ high interest over the project= Show consideration

D-Low power /low interest over the project= Least important

Table 23 Key Regional and Global stakeholders for SCS SAP

Category of Stakeholder Role	Main stakeholders		
	• United Nations Environment Programme (UNEP)		
A High nowon (high interest	United Nations Office for Project Services (UNOPS)		
over the project= Key player	 Southeast Asian Fisheries Development Center (SEAFDEC) and UNEP/GEF Fisheries Refugia Project 		
	• GEF Small Grants Programme (GEF-SGP);		

Category of Stakeholder Role	Main stakeholders		
	• Secretariat to the Coordinating Body on the Seas of East Asia (COBSEA)		
	• Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)		
	GEF International Waters Learning Exchange and Resource Network (IW:LEARN) Project		
	ASEAN Working Group on Coastal and Marine Environment (AWGCME)		
	• ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB)		
	• ASEAN Center for Biodiversity (ACB)		
	• Convention of Biological Diversity (CBD);		
	• Food and Agriculture Organization – Regional Office for Asia and Pacific (FAO-ROAP)		
	 International Union for Conservation of Nature – Asia Regional Office (IUCN-ARO) 		
	• Mangroves for the Future Initiative (MFF)		
	 Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) 		
B-High power/ low interest	UNEP Green Fins Initiative		
over the project =Meet their	International Coral Reef Initiative (ICRI)		
needs	Wetlands International		
	Ocean Conservancy		
	• South Asia Cooperative Environment Programme (SACEP)		
	Asia-Pacific Economic Cooperation (APEC)		
	Mekong River Commission (MRC)		
	• Asia-Europe Meeting (ASEM)		
	Asian Development Bank		
	World Bank		
	UNEP Programme World Conservation Monitoring Centre (WCMC)		
	UNEP Global Resource Information Database (UNEP GRID) and online World Environment Situation Room		
	Intergovernmental Oceanographic Commission of UNESCO (IOC UNESCO) and UN decade on Ocean Science		
	• Global Program of Action for the Protection of the Marine Environment from Land-Based Activities (GPA); Global		
	Partnership on Marine Litter; Global Partnership on Nutrient Management		
C Low nowor/ high interest	UN Environment Regional Office;		
over the project= Show	Ramsar Convention Secretariat		
consideration	• The Food and Agriculture Organization of the United Nations (FAO);		
	Conservation International		
	• European Union related initiatives and projects (i.e. EU/GOPA Ocean Governance: Protecting and Restoring Marine Ecosystems Project and others)		
D-Low power /low interest over the project= Least important	• Other relevant GEF LME Projects in the region (i.e. Yellow Sea LME Project; Arafura and Timor Seas Action Programme (ATSEA), Bay of Bengal LME (BOBLME); Sulu Sulawesi Sea Marine Ecoregion (SSME)		

Category of Stakeholder Role	Main stakeholders	
	٠	Northwest Pacific Action Plan (NOWPAP)
	•	Southeast Asian Programme in Ocean Law, Policy and Management (SEAPOL)

Table 24 Key partners for SCS SAP Project at regional level

Partner	Expertise	Strength	Role in SCS SAP			
Implementing Agency and Executing Agencies						
United Nations Environment Programme (UNEP)	GEF Implementing Agency and leading global environmental authority that sets the global environmental agenda, and promotes the coherent implementation of the environmental dimension of the SDGs	Implementation of GEF projects, and extensive knowledge and background of the project which include the UNEP/GEF SCS Project (Phase 1)	GEF Implementing Agency and responsible for overall supervision of the project and alignment with UNEP and GEF polices; Member of the Project Steering Committee; support the project through exchange of good practices from other similar Internal Waters Projects projects			
United Nations Office for Project Services (UNOPS)	Extensive expertise and experience in human resource management and contract management	Operational arm of UN and acts as the Executing Entity for a large number of GEF projects globally and in the East Asian region, including the GEF International Waters project in the Yellow Sea Large Marine Ecosystem	Executing Agency; Lead the engagement of national implementing partners for the execution of national activities, responsible for recruitment of staff and consultants.			
Southeast Asian Fisheries Development Center (SEAFDEC)	Extensive expertise and experience in implementing regional collaborative programs	Autonomous intergovernmental body mandated to develop and manage the fisheries potential of the region, and Executing Agency of the UNEP/GEF Fisheries Refugia Project	Executing Agency; Host of the Project Coordination Unit; Provides the administrative and financial support for the execution of regional activities			
Global and Region	nal Partners					
Secretariat to the Coordinating Body on the Seas of East Asia (COBSEA)	Regional Seas Programme that address marine pollution, strengthen marine and coastal planning and management, and strengthened regional governance for marine environmental management	Intergovernmental body that oversees the implementation of the East Asian Seas Action Plan, and Executing Agency of the UNEP/GEF SCS Project (Phase 1)	Intergovernmental convening platform to present project progress to member countries; key role in ensuring sustainability of SAP implementation at the regional level			
Partnerships in Environmental Management for	Provides solutions for effective management of coasts and oceans, working with national and local	Intergovernmental organization operating in East Asia to foster and sustain healthy and	Synergies in the implementation of the SAP and PEMSEA's SDS-SEA Implementation Plan 2018-			

Partner	Expertise	Strength	Role in SCS SAP
the Seas of East Asia (PEMSEA)	governments, private companies, communities, research and science institutions, international and regional agencies and programs, development partners and donors towards implementation of the SDS-SEA	resilient coasts and oceans, communities and economies across the Seas of East Asia	2022; work on blue economy, pollution, GIS and SeaKnowledge Bank, Arafura and Timor Seas (ATS) ATSEA 2 project and its SAP revision
GEF International Waters Learning Exchange and Resource Network (IW:LEARN) Project	Collect and share best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio	Strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio	Support the project in terms of coordination and best-practices on GIS, data and information management, guidelines for TDA and SAP revision, project presentations and participation in IW Conferences. Additional support to be defined.
GEF Small Grants Programme (GEF-SGP);	Provides financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods, with grants of up to \$50,000 directly to local communities including indigenous people, community-based organizations and other non-governmental groups	Long history of successful implementation of projects to support local communities, including several projects during the GEF SCS project 2002- 2008	Implementation of an additional 12 community- based projects for SAP implementation. CSO & CO inputs elicited for planning and M&E of the SCS-SGP partnership via annual NGO forums. Training program on science and management of SCS coastal habitats and resources for SGP proponents

The **Coordinating Body on the Seas of East Asia (COBSEA)** oversees the implementation of the Action Plan for the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Seas Region (the East Asian Seas Action Plan) [LINK] that was adopted in 1981 and revised in 1994. The East Asian Seas Action Plan aims at protecting the marine and coastal environment in the region for the health and well-being of present and future generations. COBSEA brings together nine countries (Cambodia, People's Republic of China, Indonesia, Republic of Korea, Malaysia, the Philippines, Thailand, Singapore and Viet Nam) for the sustainable development and protection of the marine environment and coastal areas of the region. Efforts are focused on addressing marine pollution, strengthening marine and coastal planning and management, and strengthened regional governance for marine environment and use of the marine and coastal environment. The Secretariat is hosted by Thailand and administered by the United Nations Environment Programme (UNEP).

84. Some of the main areas of cooperation with the SCS SAP will include:

- Ensure overall coordination between the SCS SAP implement and the development of the updated TDA and SAP to be fully inline and integrated with the COBSEA's Strategic Directions 2018-2022 [LINK], SDG Implementation Outlook and other key strategic documents. To include a plan on COBSEA's role to support the longer-term sustainability of SAP implementation;
- Joint planning on actions to support the monitoring, assessment and implementation of landbased sources of pollution including COBSEA's work on nutrients in partnership with the

Global Partnership on Nutrient Management (GPNM) building upon the initial workshop in May 2021 [LINK];

- Joint planning on actions on MPAs and the establishment of a network of MPAs, Marine and Coastal Spatial Planning (MCSP) including the training workshop in November 2020 [LINK]. Also the SCS SAP project will contribute to ongoing COBSEAs activities to contribute to the Post-2020 global biodiversity framework, with the last webinar in February 2021 [LINK];
- Cooperation on private sector engagement, economic evaluations and fund mobilization;
- For key deliverables of the SCS SAP to be discussed at the COBSEA Intergovernmental Meetings (IGM) where appropriate.

85. **Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)** is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient coasts and oceans, communities and economies across the Seas of East Asia through integrated management solutions and partnerships. PEMSEA was first established in 1994 as the Regional Programme on the Prevention and Management of Marine Pollution in the East Asian Seas, then in 1999 as it entered its second phase, as the Regional Programme on Partnerships in Environmental Management for the Seas of East Asia. In December 2006, PEMSEA was transformed from a project-based initiative into a regional coordinating institution for the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), a document that outlines a shared vision as well as the collective strategies and approaches to achieve the goals of sustainable development for the region. Participating countries of PEMSEA are Cambodia, Democratic People's Republic of Korea, Indonesia, Japan, Lao People's Democratic Republic, People's Republic of China, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste and Viet Nam, with financial support from the Global Environment Facility (GEF) through the United Nations Development Programme (UNDP).

86. Building on practical experience gained in the application of integrated coastal management (ICM), PEMSEA has developed an ICM system that addresses complex coastal management concerns covering governance and various sustainable development aspects. The SDS-SEA Implementation Plan 2018-2022 [LINK] is comprised of three Priority Management Programs and three cross-cutting Governance Programs. The Priority Management Programs include: a) Biodiversity Conservation and Management; b) Climate Change and Disaster Risk Reduction and Management; and c) Pollution Reduction and Waste Management. The cross-cutting Governance Programs include: a) Ocean Governance and Strategic Partnerships; b) Knowledge Management and Capacity Development; and c) Blue Economy Investment and Sustainable Financing. Each program consists of Expected Outcomes, Indicators of benefit/impact; Targeted Actions and Schedule.

87. Some of the main areas of cooperation with the SCS SAP will include:

- Overall coordination to ensure alignment between SAP and SDS-SEA objectives and targets at the regional and national level
- Cooperation to ensure synergies between SCS SAP updated 2022 Transboundary Diagnostic Analysis (TDA), Strategic Action Program (SAP) and corresponding National reports and National Action Plans (NAPs), with the PEMSEA State of Ocean and Coasts report and national reports [LINK];
- Exchange and coordination on lessons learned on engaging the private sector on blue economy in the region which could be instructive when you develop the private sector engagement in the region.
- Cooperation on actions to assess and support management of pollution from land-based sources;
- Coordination of data, information and GIS including links with the SeaKnowledge Bank [LINK]

• Partnership and common approaches between the SCS-SAP and the Arafura and Timor Seas (ATS) ATSEA 2 project, especially with regards to coordinating approaches on SAP implementation and reporting

5.1 NATIONAL STAKEHOLDERS

Full elaboration of national stakeholders and their role in project implementation will be provided in the National Implementation Reports (NIRs) under development, as well as their role in the national committees and working groups as previously detailed. Table 25 provides a summary of initially identifies stakeholders.

Table 25 Key stakeholders for SCS SAP Project at national level

Main stakeholders, mandate/role			
Nation	al-level coordination and execution of the project		
-	Ministry of Environment (MOE). Cambodia		
-	Ministry of Ecology and Environmental (MEE). China		
-	Ministry of Environment and Forestry (MOEF) Indonesia		
-	Department of Environment and Natural Resources (DENR) Philippines		
-	Ministry of Natural Resources and Environment (MONRE) – Department of Marine and Coastal		
	Resources (DMCR), Thailand		
-	Ministry of Natural Resources and Environment (MONRE) – Viet Nam Administration of Seas and		
	Islands (VASI), Viet Nam		
Techni	cal inputs to the lead national agency		
Ca	mbodia		
-	Department of Nature Conservation and Protection		
-	Department of Planning and Legal Affairs		
-	National Park and Wildlife Sanctuary Office		
-	Department of Pollution Control and Coastal Coordinating Unit		
Ch	lina		
-	Department of Pollution Control		
-	Department of International Cooperation		
-	Department of Policy and Law		
-	South China Institute of Environmental Sciences		
-	Department of International Cooperation of the State Oceanic Administration		
Inc	lonesia		
-	Directorate of Marine and Coastal Degradation Control		
-	Directorate of Water Pollution Control		
-	Directorate of Management of Essential Ecosystem		
-	Directorate of Environmental Impact Assessment and Regional Planning		
-	Directorate General of Catchment Area Management and Conservation Forest.		
Phi	lippines		
-	Office of the Undersecretary for Environment and International Environmental Affairs		
-	Biodiversity Management Bureau		
-	Environmental Management Bureau		
-	River Basin Control Office		
-	Mines and Geoscience Bureau		
-	Land Management Bureau		
-	Ecosystems Research and Development Bureau		
-	National Water Regulatory Board		
-	Foreign Assisted Service and Project Service		
Th	ailand		
-	Office of Marine and Coastal Resources Conservation and its Mangrove Conservation Office,		
	Legal Affairs Unit, Coastal Area Management Division, Planning Division, Marine and Coastal		

Main s	takeholders, mandate/role
	Resources Management Promotion Division, and Marine and Coastal Resources Research and
	Development Institute
-	Office of Natural Resources and Environmental Policy and Planning, MONRE
-	Office for International Cooperation, MONRE
Vie	et Nam
-	Mangrove Ecosystem Research Centre
-	Vietnamese Academy of Science and Technology's Institute of Oceanography (particularly its
	Department of Marine Botany) and Institute of Marine Environment and Resources
-	Viet Nam's Administration of Seas and Islands' Centers for Integrated Coastal Planning and
	Management (both northern and southern centers)
-	Institute of Strategy and Policy on Natural Resources and Environment
-	Department of International Cooperation and Science Technology
-	Viet Nam National University
-	Department of Environmental Economics and Management of the National Economics University
	of Viet Nam
-	Center for Environmental Research and Education of the Hanoi University of Education
-	Faculty of Geology at the Hanoi University of Science
Nation	al coordination planning and governance of the project
	wheeding
Ca	IIIDOUIA Eistonia Administration of the Ministry of Agriculture Exercise and Eistonia
-	Fisheries Administration of the Ministry of Agriculture, Forestry and Fisheries
-	Ministry of Land Management, Orban Planning and Construction
-	Ministry of Public works and Transport
-	Ministry of Foreign Affairs and International Cooperation
-	Ministry of Planning
- Ch	Ministry of women's Affairs
Cn	Ina Cuantani Managana Daganah Cantan
-	Guangxi Mangrove Research Centre
-	South China Sea Institute of Oceanology of the Chinese Academy of Sciences
-	Institute of Environmental Sciences of Sun Yat-Sen University
-	Research Centre of Wetland Science of Sun Yat-Sen University
- T	Department of Natural Resources and Environment at Guangdong Ocean University
Inc	Ionesia Ministry of Morino Affoirs and Fisherias
-	Ministry of Marine Attains and Fisheries
-	Coordinating Ministry of Manume and Natural Resources
-	Ministry of Foreign Allairs
-	Ministry of Agriculture
-	Ministry of Communications and Information
-	Ministry of Communications and Informatics
-	Ministry of Research, Technology and Higher Education
-	Ministry of Transportation
-	Ministry of Tourism Ministry of Dublic World, and Henrice
-	Ministry of Spatial Diagning
-	Ministry of National Davidament Diamina
-	Coo Special Information Decend
- Dh	Geo Spanar mormation Board.
FI	mppines National Economia Davalonment Authority and its Office of Acriculture Natural Decourses and
-	Finite of Agriculture, Natural Resources and
_	Burgan of Fisheries and Aquatic Resources and its National Fisheries Research and Development
	Institute
_	Department of Foreign Affairs and its Maritime and Ocean Affairs Office
-	Department of Science and Technology and the Philinnine Council for Agriculture Aquatic and
_	Natural Resources Research and Development
-	Department of Interior and Local Government
-	Philippine National Police Maritime Group
_	National Commission on Indigenous Peoples
Тŀ	ailand
-	Ministry of Agriculture and Cooperatives' Department of Fisheries
L	

Main stakeholders, mandate/role

- Ministry of Transport's Marine Department
- Ministry of Finance
- Ministry of Foreign Affairs
- Ministry of Science and Technology
- Kingdom of Thailand's Geo-Informatics and Space Technology Development Agency
- Maritime Enforcement Coordinating Center
- Office of Tourism Authority of Thailand

Viet Nam

- Ministry of Agriculture and Rural Development which encompasses fisheries
- Ministry of Planning and Investment
- Ministry of Finance
- Ministry of Transport
- Ministry of Science and Technology
- Ministry of Culture, Sport and Tourism
- Ministry of Education and Training
- Vietnamese Academy of Science and Technology and its Institute of Oceanography

Technical inputs to national and local operational management of the project

Cambodia

- Ministry of Environment
- Fisheries Administration
- Royal University of Agriculture, Phnom Penh
- University of Phnom Penh
- Provincial governments of Kampot, Kep, Sihanoukville and Koh Kong
- Provincial departments: Department of Environment, Department of Agriculture, Provincial Fisheries Office, Department of Land Management, Department of Tourism, Department of Rural Development, Department of Women's Affairs, Department of Planning, Department of Public and Transport, Department of Mines and Industry, Department of Water and Meteorology, and Police Department
- Peam Krasop Wildlife Sanctuary Administration
- Coastal Community Fisheries Khan Stung Hav, Sihanoukville
- Environmental Protection and Development Organization
- Kampong Samaki Community Fisheries Coastal Resources Protection organization
- Potsar and Champey Community Fisheries Federation

China

- Provincial governments of Guangdong, Guangxi and Hainan and the governments of the prefecture-level cities
- Government of Shantou City and its Shantou Wildlife Conservation and Management Office and Shantou Wetland Natural Reserve Station
- Government of Shenzhen City and its Baoan Bureau of Environmental Protection
- Beihai Municipal People's Government and its Environmental Protection Bureau
- Hepu County Government and its Hepu Dugong Nature Reserve
- Fangchenggang City government and its Oceanic Administration Bureau, Environmental Protection Bureau, Forestry Bureau, City Planning Bureau, Fisheries Bureau and Tourist Bureau
- Guangdong Ecological Society
- Zhuhai Biological Society
- Leizhou Peninsula Coastal Ecological Conservation and Education Society
- Guangxi Biodiversity Research and Conservation Association
- Fangchenggang Mangrove Protection Association
- Hainan South China Sea Institute of Tropical Marine Biology and Disease
- Beihai Civil Volunteers Association

Indonesia

- Center for Coastal and Marine Resources Studies of Bogor Agricultural University
- Research Center for Oceanography of the Indonesian Institute for Sciences
- Faculty of Economics of Budi Luhur University
- Faculty of Law at the University of Padjadjaran-Bandung.
- Provincial governments of Riau, Kepulauan Riau, Jambi, West Kalimantan and Bangka-Belitung and their city-level governments
- Environmental Office of West Kalimantan Province

Main stakeholders, mandate/role

- Batu Ampar Local Government
- Regional Planning and Development Agency of Bangka-Belitung
- Sub-Directorate of Sea, Shore and Land Ecosystems of the Environmental Management Impact Board of Batam City Government
- Sub-Directorate of Environment Monitoring and Rehabilitation of Batam City Government
- Local Office of Fisheries and Marine Affairs in Batam
- Infrastructure and Natural Resources Division of Bintan City Government
- Local Agency for Development Planning in Bintan
- Indonesian Institute of Mangrove Research and Development
- WWF Indonesia
- Wetland Indonesia
- Komunitas Sahabat Alam
- Koperasi Panter
- Yayasan Karya Banua Pulanggana
- Kelompok Peduli Lingkungan Belitung
- Komunitas Sahabat Alam
- Lembaga Pengelola Sumberdaya Terumbu Karang (LPSTK) Desa BENAN
- Lembaga Swadaya Masyarakat Pelita Alam
- Belukap and Yayasan Gema Lingkungan Indonesia

Philippines

- University of the Philippines' Marine Science Institute and the Institute of Environmental Science and Meteorology
- Policy Studies Division of DENR's Planning and Policy Studies Office
- Environmental Research Section of DENR's Environmental Management Bureau
- Caves, Wetlands and Other Ecosystems Section of DENR's Biodiversity Management Bureau
- Palawan Council for Sustainable Development
- Offices of the Provincial Agriculturists
- Municipal Government of Bolinao in Pangasinan
- Municipal Governments of Busuanga and Taytay in Palawan
- Malampaya Sound Protected Land and Seascape Administration in Palawan
- Municipal Government of Masinloc in Zambales
- Fisheries and Aquatic Resources Management Council
- Association of Resort Owners and Tourism Establishments
- Anak ng Dagat and Amahan at Ugnayan ng Pangisdaan ng Orion.

Thailand

- Marine Biodiversity Research Group of Ramkhamhaeng University
- Faculty of Environment and Resource Studies at Mahidol University
- Faculty of Fisheries of Kasetsart University
- Faculty of Economics of Kasetsart University
- Marine Science Department and Aquatic Resources Research Institute of Chulalongkorn University
- Faculty of Sciences at Prince of Songkla University.
- Provincial governments of Narathiwat, Pattani, Songkhla, Nakhon Si Thammarat, Surat Thani, Chumphon, Prachuap Khiri Khan, Petchaburi, Samut Songkram, Samut Sakhon, Samut Prakan, Chonburi, Rayong, Chantaburi, and Trat
- Mu Koh Chang National Park in Trat Province
- Thale Noi Hunting Non-Hunting Area Administration in Songkhla
- Prednai Mangrove Development and Conservation Group
- Fisherfolk associations
- Six-Tambol (Sub-district) Network for Collective Coastal Management in Trat Province
- Thai Nature Study Centre
- Ao Baan Don Conservation Network
- Traditional Knowledge Protection Network
- Songkhla Community Natural Resources and Environment Protection Volunteer
- Wetland Conservation Group Baan Bangnokork
- Pattani Small-scale Fisher Network
- Phatthalung Provincial Environment Network
- Community Natural Resources Development Institute.

Viet Nam

Main stakeholders, mandate/role

- Offices of Viet Nam's coastal provincial governments and its provincial departments of environment and natural resources, fisheries, tourism, agriculture and rural development, planning and investment, science and technology, and police.
- Provincial districts, cities, and district-level towns, commune-level towns and communes
- Municipal rural districts and urban districts and wards
- Civil societies, community organizations and NGOs such as district level farmers' associations, ward level women's associations, provincial unions of science and technology associations, provincial level fisheries associations, town level youth unions, and provincial forestry club

6. MONITORING AND EVALUATION

88. The project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Appendix 1. Reporting requirements and templates are an integral part of the UNEP legal instruments signed with the executing agencies: The UNEP and UNOPs Letter of Agreement signed on 30 June 2018 and the UNEP and SEAFDEC Project Cooperation Agreement signed on 31 December 2017.

89. The project M&E plan (see Appendix 5) is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Appendix 1 includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Appendix 6 will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Appendix 5. Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget. The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the Project Manager to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

90. The project Steering Committee will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility to the Task Manager in UNEP-GEF. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

91. Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. At the execution level, quarterly quality assurance will take place to ensure that execution is on track and to discuss quarterly plan for the subsequent month as well as adaptive management measures require to ensure execution stays on course, or, if the situation arises risk and issues are escalated to the appropriate instance, including the Steering Committee if appropriate. Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Project Steering

Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project execution partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

92. A mid-term management review or evaluation will take place in 2022 and will include all parameters recommended by the GEF Evaluation Office for terminal evaluations and will verify information gathered through the GEF tracking tools, as relevant. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Such parties were identified during the stakeholder analysis. The Project Steering Committee will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.

93. An independent terminal evaluation will take place at the end of project implementation. The Evaluation Office of UNEP will manage the terminal evaluation process. A review of the quality of the evaluation report will be done by EOU and submitted along with the report to the GEF Evaluation Office not later than 6 months after the completion of the evaluation. The standard terms of reference for the terminal evaluation are included in Appendix 9. These will be adjusted to the special needs of the project.

7. COMMUNICATION AND KNOWLEDGE MANAGEMENT

94. All components of the project involve activities centered on public awareness and the communication and exchange of data and information both within and beyond the network partners. A wide range of public awareness materials (posters, brochures, video shorts and other materials) have already been produced in the seven national languages and copies are lodged on the existing SCS project website from which they can be downloaded and reproduced or edited and altered as required. It is intended in one component at least to build a network of local journalists interested in environmental issues and stories and to provide them with scientifically sound materials that can be adapted to various forms of mass communication. Central to the communication strategy will be the continued operation of the South China Sea website as a valuable resource and repository of data, information and tools relating to environmental management and sustainable use of coastal resources. This website allows network partners to up-load scientific data and information directly to the regional databases and up-load information from ongoing activities at the national level to dedicated pages.

A majority of the outputs of the SCS project were used as inputs to the development of SAP goals, targets, and activities and will be important references for individuals and organisations involved in SAP implementation and in gauging the efficacy of SAP interventions. From the perspective of regional co-ordination and execution of SAP activities, the existing SCS website will act as a platform for ensuring ease of access to and downloading of SCS project outputs. The large number and wide range of outputs generated through the operation of large multi-lateral, intergovernmental projects creates a need for the maintenance of repositories that provide for the efficient online storage, searching, and download of outputs. Increasingly, ensuring ease of accessibility to outputs is becoming an expectation of donors, and certainly the experience of the SCS project suggests that it may assist in increasing the accountability, transparency, and legitimacy of project work. The repositories of projects documents,

training materials, multi-media outputs, and public communication materials developed as part of the SCS project will be built on by the present project.

95. Additionally, project communications strategy will be elaborated with the support of the Communication Officer. This will reflect the nine key guiding principles of the project and its alignment with the achievement of the SAP targets, CBD Post 2020 targets s and Sustainable Development Goals. This document will give strategic direction to communications activities of the project in areas relating to: (1) the development and conduct of a baseline assessment and audit of communications needs and priorities; (2) the development of appropriate communications and knowledge management platforms for the project website and operation of an online Community of Practice; (3) the project's branding and style brief; (4) media relations, including the establishment of public relations protocols and development of partnerships with regional and national media outlets; (5) representation of the project at key global, regional and national political and scientific events; (6) the use of social media in syndicating project news and information and creating awareness of SAP implementation and priority issues; (7) costed plans for the development of multi-media communications products and knowledge exchange tools; and the (8) capacity development of national stakeholders on effective use of the media in support of the achievement of SAP targets. The strategy will also contain a comprehensive project FAQs section and listing, including contacts, of all priority media outlets.

5. PROJECT FINANCING AND BUDGET

96. The overall budget for the project is US\$98,451,948 of which US\$15,000,000 will be financed by the GEF Trust Fund through the GEF International Waters focal area.

Component Summour	Total US\$		
Component Summary	UNOPS	SEAFDEC	TOTAL
Component 1. Reducing habitat degradation and loss via national and local reforms to achieve Strategic Action Programme targets for coastal habitat management in the South China Sea	5,312,694	1,219,534	6,532,227
Component 2. Strengthening knowledge-based action planning for the management of coastal habitats and land-based pollution to reduce environmental degradation of the South China Sea	2,057,638	1,201,137	3,258,775
Component 3. Facilitating regional and national level integration and cooperation for implementation of the South China Sea Strategic Action Programme	1,130,876	3,064,150	4,195,026
Project Management (PMC)	643,822	97,680	741,502
Monitoring and Evaluation (M&E)	149,970	122,500	272,470
TOTAL	9,295,000	5,705,000	15,000,000

Table 26. Summary Budget

97. Total co-financing is 83,451,948 USD, representing 85 % of the total project funding and is broken down as follows:

Co-financing	USD
Governments (in-kind)	81,097,585
UNEP (in-kind)	500,000
Cost to COBSEA (in cash and in-kind)	1,854,363
Total	83,451,948

98. Following the Inception Workshop additional in-kind co-financing will be defined based on current initiatives and partnerships in the region, and therefore co-financing will need to be reviewed and revised on a yearly basis. Countries will report on their co-financing as elaborated in Appendix 6.

 Table 27. Summary of in-kind co-financing estimates from governments of participating countries of the UNEP/GEF SCS SAP Project

	Government In-kind (
Country	National Coordination	National Coordination Ongoing and Planned	
	and Planning*	National Initiatives	
Cambodia	1,670,733	2,792,075	4,462,808
China	2,884,640	8,000,000	10,884,640
Indonesia	3,109,920	17,063,050	20,172,970
Philippines	3,224,320	16,568,935	19,793,255
Thailand	-	18,102,309	18,102,309
Vietnam	-	7,681,603	7,681,603
	10,889,613	70,207,972	81,097,585

* Based on estimated contributions of individual's time, local transport, office space and facilities and domestic and international communications

APPENDICES

APPENDIX 1. RESULTS FRAMEWORK

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
Component 1. Reducing habitat degradation and loss via national and local reforms to achieve Strategic Action Programme targets for coastal habitat management in the South China Sea					
1.1 Appropriate forms 0 0 1.1 Appropriate forms 0 1	Total area (ha) of mangrove designated as national park or protected area	14 percent (246,122 ha) of mangrove area in SCS presently managed as national park or protected area	1.1.1 Declaration of 57,400 ha of mangrove as National Parks and Protected Areas	Official proclamations, executive orders, and ordinances establishing mangrove parks and protected areas	Adequate joint government and community commitment to manage mangrove on a protected area basis
	Status of endorsement of management plans Total area (ha) of mangrove under management plan for sustainable use	13 percent (225,512 ha) of mangrove area in SCS presently managed as non-conversion, extractive resource use areas (fish, crabs etc.)	1.1.2 Designation and plans for the management of 166,600 ha of mangrove as non-conversion, sustainable use areas	Maps and site characterisations for priority mangrove sites Endorsed management plans for mangrove sites	Adequate local cooperation to agree boundaries and compile and analyse information to identify threats and agree management actions
	Total area (ha) of presently unmanaged mangrove for which regulations/ordinances are adopted to enable sustainable management	Legal frameworks to enable sustainable management of 56 percent of mangrove area in the SCS	1.1.3 Reform of laws and regulations for the sustainable use of 602,800 ha of mangrove forest	Endorsed policies, executive orders, provincial/local ordinances and by-laws	National and provincial/local government commitment to adopt governance reforms that reflect local needs
	Total area (ha) of deforested mangrove land rehabilitated	Decadal rate of loss of total mangrove area from SCS is estimated at 16 percent	1.1.4 Replanting of 21,000 ha of deforested mangrove land	Maps and aerial imagery of rehabilitated mangrove areas	Landowner commitment to convert present land-use to mangrove forest
	Measures of ecological & environmental indicators at enrichment planting sites: forest cover; number and diversity of true mangrove species; and size and abundance of <i>Scylla</i> spp and <i>Sesarma</i> spp	Predominantly single-species mangrove reforestation initiatives over recent decades have compromised biodiversity and hazard risk reduction potential of rehabilitated mangrove areas	1.1.5 Biodiversity increased for 11,200 ha of mangrove forest via enrichment planting	Updated site characterisations for enrichment planting sites, including ecological and socio-economic data	Appropriate selection of enrichment planting sites to minimise risks associated with: chronic pollution from shrimp farming operations; charcoal production; and storm surge inundation
	Status of mechanism established for monitoring mangrove management effectiveness and stress reduction	Management, ecological and environmental, and socio- economic indicator frameworks developed but not yet applied at priority sites	1.1.6 Established mechanism for monitoring management, ecological and socio- economic indicators [based on SAP results framework]	Annual results report on mangrove management at priority sites	Capacity of provincial and local level resource managers to collate nationally and regionally comparable information and data

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
1.2 110,430 ha of coral reef at 46 priority sites managed sustainably, including a reduction in the decadal rate of degradation in live coral cover from 16 to 5%	 Status of management capacity, including: Human resource capacity; Facilities and equipment; and Sustainable financing 	Priority coral reef sites in the SCS characterised as being sustainably management due to management capacity constraints	1.2.1 Management capacity built for 46 coral reef sites	Assessment of government and civil society organisation competencies and mgmt. capacity developments needs Reports of capacity building initiatives	Management capacity initiatives are sufficiently well planned to accommodate biodiversity conservation and livelihood/food security needs at coral reef sites
	Status of institutional reform for multi-sectorial, community-based and multiple use coral reef management	Predominantly single sector (environment) and centralised approach to coral reef management	1.2.2 Management approaches and policy, legal & institutional reforms (integrated, community- based, multiple use) improved at 46 coral reef sites	Reports of cross-sectorial, multi-stakeholder coral reef management bodies	Existing tensions between coral reef resource users and governments may limit community participation
	Number of management tools developed, adopted and applied at priority coral reef sites	Coral reef management largely focused on awareness raising with limited use of management tools to address threats to coral reef sites	1.2.3 Management tools (licensing and permit systems, seasonal closures, zoning) developed and utilized to address key threats at priority sites	Endorsed policies and executive orders provincial/local ordinances and by-laws for coral reef management	Commitment of central and local governments, as well as resource users, to jointly develop and apply management tools governing coral reef resource use
	Status of mechanism established for monitoring coral reef management effectiveness and stress reduction	Management, ecological and environmental, and socio- economic indicator frameworks developed but not yet applied at priority sites	1.2.4 Established mechanism for the monitoring of management, ecological and socio-economic indicators at 46 sites	Annual results report on coral reef management at priority sites	Capacity of provincial and local level resource managers to collate nationally and regionally comparable information and data
1.3 Conservation, management and sustainable use of 15,848 ha of known seagrass area in the South China Sea	Number of sites under sustainable management Number of seagrass sites for which management regulations exist	Majority of seagrass areas in the SCS are unmanaged, or managed ineffectively, due to lack of enabling environment for zoning/regulation	1.3.1 Twenty-one seagrass areas totalling 15,848 ha under sustainable management with supporting laws and regulations	Annual country reports on seagrass mgmt Laws and regulations enacted for seagrass management	Central and local government commitment to enact laws for seagrass management in light of development pressures
	Number of MPA management plans containing seagrass-related management actions	Sustainable use and management of seagrass and related resources is rarely addressed in management plans for MPAs in the SCS	1.3.2 Amended management plans for 7 existing MPAs with significant seagrass areas, to include specific seagrass-related management actions and policy, legal & institutional reforms	Amended MPA management plans	Adequate local cooperation, as well as satisfaction with existing MPA management, to agree priority seagrass management actions
	Number of newly established MPAs focused on seagrass management	MPA management in SCS predominantly focuses on strict protection of coral reef areas	1.3.3 Designation of 7 new Marine Protected Areas focusing on seagrass areas	Official proclamations, executive orders, and ordinances establishing MPAs for significant seagrass sites	Adequate joint government and community commitment to manage seagrass on a protected area basis

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
	Status of mechanism established for monitoring seagrass management effectiveness and stress reduction	Management, ecological and environmental, and socio- economic indicator frameworks developed but not yet applied at priority sites	1.3.4 Established mechanism for monitoring management, ecological and socio- economic indicators at 20 sites	Annual results report on seagrass management at priority sites	Capacity of provincial and local level resource managers to collate nationally and regionally comparable information and data
1.4 Integrated management of 783,900 ha of coastal wetland at 19 sites, including habitat restoration and protection strengthened at priority locations	Number of integrated management plans developed Total area (ha) of wetland under management plan for sustainable use	Population growth, and urbanisation of the coastal fringe, combined with rapid economic growth in the SCS region places tremendous pressure on coastal wetland ecosystems	1.4.1 Integrated management plans developed and under implementation for at least 3 lagoons (26,818 ha), 9 estuaries (614,680 ha), 5 tidal flats (96,903 ha), 1 peat swamp (45,700 ha) and 1 non-peat swamp (9,808 ha)	Adopted integrated management plans Annual implementation reports, including results of environmental stress reduction initiatives	Adequate local cooperation to agree boundaries and compile and analyse information to identify threats and agree management actions
	Number of wetlands sites assigned protection status	The riparian states of SCS face significant pressure to convert wetlands for economic development with little focus on conservation or sustainable use	1.4.2 Declaration of at least 7 wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites).	Official proclamations, executive orders, and ordinances establishing protection status for wetland sites	Development pressures may result in adoption or revision of land-use policies which compromise efforts to conserve priority wetland sites
	Status of mechanism established for monitoring wetland management effectiveness and stress reduction	Management, ecological and environmental, and socio- economic indicator frameworks developed but not yet applied at priority sites	1.4.3 Adoption of a regional estuary monitoring scheme and its national implementation	Annual results reports on wetland management at priority sites	Capacity of provincial and local level resource managers to collate nationally and regionally comparable information and data
1.5 National and regional level cooperation in tracking results of SAP actions for coastal habitat management	Extent and continuity of participation in regional fora for coastal habitat management Scope and uptake of joint management and planning decisions	No existing fora at national and regional level in the SCS to network coastal habitat scientists and management specialists	1.5.1 National committees and regional networks of habitat specialists established under the SCS project revitalized and functioning	Meeting reports of periodic national habitat committees and regional working groups	Consultative processes may not elicit adequate stakeholder input and support from national participants
	Status and extent of uptake by national Inter-Ministry committees of SAP implementation results reporting Level of congruence of national and regional	Results frameworks for the management of mangroves, coral reefs, seagrass and wetlands of the SCS developed through national and regional consultative process but has not yet been applied	1.5.2 Mechanism to monitor and evaluate the impacts of SAP implementation and achievement of habitat targets operational [including agreement on standardized methods and guidelines for inventory and assessment]	Approved SAP results framework online Approved national and regional reporting templates published	Sustained commitment of senior officials with responsibility for SAP implementation to develop and operate a harmonized results monitoring and reporting system for coastal habitat management
Outcomes	Indicator(s) Baseline Targets End of Project Source of Verification		Risks and Assumptions		
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	indicator sets with the proposed targets and outcomes of the SAP			Annual national and regional results reports published and disseminated	
	Extent and continuity of local leader and local government participation in community round-table meetings Improved local relevance of SAP implementation initiatives	Limited engagement of community-based governance mechanisms in planning coastal habitat management Low level mobilization of civil society, community groups and the private sector in habitat management	1.5.3 Community leaders and local government from priority habitat sites networked via national and regional round-table meetings to foster cooperation and knowledge sharing on achievements and best practices	Meeting reports of round- table meetings (including records of joint management decisions and participant lists) Annual reports of best practice examples of community-led SAP implementation	Existing tensions between land- owners and government agencies may limit community leader participation Internal tensions between community organisations may be exacerbated by discussions about community priorities
	Demonstrable use of state of coastal habitat reports in national and regional planning	Baseline national habitat reports developed and require periodic uptake	1.5.4 Progress and status report of regional and national SAP implementation	Published status report of regional and national SAP implementation	Adequate national and regional mechanisms for the step-wise review of information and data used in reporting
Component 2. Strengt China Sea	hening knowledge-based actio	on planning for the management o	f coastal habitats and land-base	ed pollution to reduce environm	ental degradation of the South
	Volume of remotely sensed information interpreted and made available for planning Extent of uptake of remotely sensed coastal habitat information and data in management planning and action	Rapid advancements in aerial visual survey techniques and remote sensing of inter-tidal and shallow water biomes have potential to greatly enhance coastal habitat management planning in the SCS marine basin	2.1.1. Validation of existing or improved algorithms with on-site data	Regional report on methodologies and procedures for the application of aerial visual survey and remotely sensed data in coastal habitat management in the SCS marine basin published and accessible online	Adequate national and local capacity to ground-truth and conduct rapid assessments for validation of remotely sensed information and data
2.1 Enhanced information-base for coastal habitat management, monitoring and action planning	Number and completeness of regionally comparable coastal habitat site characterisations for 134 sites Number of datasets for 134 coastal habitat sites accessible online in centralised repositorty	Regional GIS and meta- database of SCS coastal habitat information developed but not updated since 2008 due to lack of a regional mechanism for collation and exchange of data	2.1.2 Mechanism for collection and exchange of regional coastal habitat and pollution information and data established	Agreed site characterisation forms for the compilation of regionally comparable coastal habitat information and data GIS and meta-database online and routinely updated by SAP implementation partners	Engaging appropriate expertise to facilitate consensus on the selection of physical, biological and socio-economic variables to be used in characterising coastal habitat sites, as well as willingness of data holders to share
	Volume of CO ₂ captured and stored by SCS habitats defined	Lack of SCS specific information on carbon sequestration by coastal habitats constrains resource managers in	2.1.3 Role of coastal habitats of the South China Sea in climate change adaptation and	Published report on the capture and storage of carbon by coastal habitats, including national and regional strategic	Appropriate selection of in-situ monitoring sites to minimise risks associated with: typhoon; emerging development

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
	Extent of uptake of information on carbon sequestration and storage used in mgmt. planning	making political case for better resourcing	the sequestration and storage of carbon	planning recommendations, shared online	pressures; and storm surge inundation
	Independent peer acceptance of review Extent of uptake of review and its recommendations in updating national action plans and diagnostic analyses	Sea level rise, climate variability and change, and episodic natural disasters in SC identified as threats to sustainable management of coastal habitats	2.1.4 Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats of the South China Sea	Review report published and shared regionally Communications on review outcomes published by media outlets and syndicated via GEF:LME LEARN	Engaging appropriate breadth of expertise in conducting review to facilitate consensus building at both national and regional levels on findings and recommendations
	Countries (6) contribute to compiled meta-database on existing data No of recommendations and innovative approaches to support monitoring and assessments	No overall comparable habitat and pollution database available in the SCS	2.1.5. Review of current status of habitat and pollution data available in the SCS, gaps and challenges and innovative technology and approaches to monitoring and assessments that can support SCS monitoring programme 2.1.6 A regional system for periodic monitoring of the state of coastal habitats of the South China Sea	Review assessment report with contribution from all countries Proposal and recommendations on sustainable solution to support monitoring and assessments (to be integrated in SAP)	Data at national level under the authority of several intuitions and requires coordination and political will to provide information on meta data and gaps
2.2 Effective integration of regional science in the management of land-	Extent of decision-maker awareness of localised v. transboundary impacts of land-based pollution in the SCS Extent of use of model outputs in revising the Strategic Action Programme for the SCS	Carrying capacity of the SCS open shelf system based on its natural capacity to assimilate contaminants, in particular nutrient inputs from land, has been modelled although findings not well known by decision-makers	2.2.1 Updating the nutrient carrying capacity model for the SCS marine basin and integration into SCS GIS	Nutrient carrying capacity accessible online Communications products available for regional and global sharing 1 * IW Experience Note	Communication strategy and products sufficiently well designed to achieve desired reach and impact
based pollution	Extent of decision-maker awareness of SCS open shelf carrying capacity for heavy metal contaminants Extent of use of model outputs in revising the	Need for simple model of pollution impacts under different development scenarios, specifically as they relate to heavy metal contaminant loadings	2.2.2. Regional level assessment of impacts of key contaminants (nutrients, heavy metals, oil, litter) and national or local assessments based on NAP and hotspots	GIS-based model of SCS carrying capacity for heavy metal contamination developed & online Communications products available for regional and global sharing	That modelling may be carried out on a 2-dimensional basis and making the assumption that the surface, mixed layer is vertically homogeneous

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
	Strategic Action Programme for the SCS Status of initiative to quantify heavy metal contaminant impacts on: (a) water quality; (b) reproductive capacity of living resources; (c) contamination of human food sources; and (d) bio- accumulation. Number of heavy metal pollution hotspots characterised	Framework procedures for estimating the impacts of heavy metal contamination in SCS have been developed although not yet applied Lack of regionally comparable information and data on heavy metal contaminated hotspots		Published report shared nationally and regionally, including national language translation where appropriate 1 * IW Experience Notes Pollution hotspot site characterisation templates developed Hotspot information accessible online	Characterisations of pollution hotspots provide adequate information regarding heavy metal contaminants and threats to environmental and public health Sufficient national and local capacity, including laboratory facilities, to compile regionally comparable site characterisations
	Number of aquaculture sites for which effluent and contaminant loadings estimated	Effluent from aquaculture and mariculture operations identified as key threat to dominant coastal biomes	2.1.3. Quantification of effluent volumes and contaminant loadings from coastal aquaculture to the SCS marine basin	Published methodology and procedures for estimating aquaculture pollution loadings and impacts 1 * IW Experience Note	Willingness of private sector to engage and cooperate in efforts to determine environmental impact of operations
2.3 Strengthened and harmonized national policies and laws, and supporting financial mechanism, for the management of habitats and land- based sources of pollution	Number of best practice technologies and measures tested, documented and shared	Lesson learned in community- based wastewater mgmt. in Batam, Indonesia documented and shared regionally although other examples from East Asian seas region largely focus on broad scale ICM planning	2.3.1. National best practices in waste water management, law enforcement, and community and industry participation in managing land-based sources of pollution and habitat management documented and shared	Catalogue of best practice technologies and management approaches for land-based pollution published and accessible online	Challenges and costs associated with demonstrating stress reduction benefits may constrain replication and upscaling Uptake of best practices may also be constrained if the publicizing of the benefits is inadequate
	Number of countries with demonstrable harmonization of sectoral governance frameworks achieved as a result of review findings	Effectiveness of existing legal and institutional frameworks limited by predominantly single sector approaches	2.3.2 Review of legislative and institutional frameworks for land-based pollution and habitat management in participating countries	Review published and shared regionally	Willingness of sector agencies to participate in review Harmonization of governance frameworks may take longer than the period of the project
	Number of countries with demonstrable adoption of harmonized, regionally comparable SOPs	Lack of Standard Operating Procedures for land-based pollution management	2.3.3 Harmonized national Standard Operating Procedures for land-based pollution control and	Regional guidelines on Standard Operating Procedures published	Willingness of sectoral agencies to participate in the development of Standard Operating Procedures

Outcomes	Indicator(s)	Baseline	Targets End of Project	Targets End of Project Source of Verification	
			management [including agreed sediment, biota, & water quality criteria]	Adopted National Standard Operating Procedures available online	
	Number of countries with endorsed national policies and enacted laws and regulations for land-based pollution control	Absence of clear and effective policies, laws, and regulations relating to control of land-based pollution	2.3.4. Revised national/provincial policies and supporting regulations for land-based pollution and habitats developed, enacted and implemented	6 national reports on policy and legal aspects of land- based pollution management Endorsed policy and executive orders, provincial/local ordinances and by-laws	National and provincial government commitment to reform
2.4 Improved national and regional values for the Total Economic Values of coastal habitats for use in development planning and decision-making	Status of initiative to develop national and regional estimates economic linkages between habitats and coastal fish production Status of initiative to value economic costs of coastal shipping accidents and pollution damage Status of initiative to update estimates of total economic values of coastal biomes	Values determined for SCS are incomplete as not all known goods and services from individual biomes have been valued Comparatively few existing values for the services provided by habitats as nursery areas for coastal living resources No existing information linking shipping accidents to loss of economic benefits associated coastal biomes in the SCS Economic valuation of coastal habitats used in cost benefit analysis of endorsed Strategic Action Programme actions in 2008	2.4.1 Expanded datasets and estimates of economic valuation information on the goods and services of SCS coastal habitats	6 national reports on economic valuation of coastal biomes, including tabulated data and reference material, published 1 regional report on the economic losses consequent upon coastal shipping accidents and pollution damage 1 regional report on updated Total Economic Values for coastal habitats published and online	
	No of case studies/best practices in the SCS on blue and circular economy approaches	Blue and circular economy emerging priority since SAP adoption in 2008, and needs to be consider as an important aspect for future SAP implementation	2.4.2. Compilation of good examples, and identify recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management	1 report on good examples, and recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management SAP revision incorporated blue and circular economy	Requires partnerships with other institutions and projects working on this
2.5 Regionally appropriate tools and mechanisms to guide	Status of initiative to develop and apply standards and criteria, including	Sustainable management indicator matrices developed for dominant coastal habitats but	2.5.1 Regionally applicable1 regional report documenting sustainability of systems developed and		Supporting communication approach and facilitation of consultative processes are

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
the development of sustainable management systems for coastal habitats	TWAP methodology, for determining the sustainability of coastal management systems	not yet applied and tested in framework of SAP implementation	coastal habitat management systems, including documented models of sustainable use	applied at priority coastal habitat sites	sufficiently well design to ensure stakeholder engagement and participation
and land-based pollution	Number of best practice management measures and technologies documented, codified, and accessible via online catalogue	Lessons learned and best practices in coastal habitat management from 23 demonstration sites documented and published in peer reviewed article	2.5.2. Online catalogue of best practice management measures and technologies for sustainable use of SCS coastal habitats and land-based pollution management	Catalogue of best practices accessible online Communications products on best practices produced and syndicated online	Internet connectivity and in provincial and local offices of environment and natural resource agencies adequate to support effective online knowledge sharing
	Extent and continuity of local leader and local government participation in study tour and exchange initiatives	Limited engagement of community-based governance mechanisms in national policy and planning	2.5.3 Government officials, community leaders, and habitat and pollution managers exposed to on- going practices in	Reports of study tour and exchange initiatives Annual reports of best	Existing tensions between local leaders, land owners, and government agencies may limit community leader or government official participation
	Level of improved local relevance of national policy and planning efforts for reducing environmental degradation in the SCS	Low level mobilization of civil society, community organisation and the private sector in environmental investment planning	rehabilitation, management, and pollution control and treatment via programme of training, study tours and exchange	practice examples of community level inputs to SAP implementation initiatives	Study tours and exchange initiatives are sufficiently well designed to guide uptake of best practice at provincial/community levels
2.6 Updated and Ministerially adopted Transboundary Diagnostic Analysis and Strategic Action Programme, including prioritization of national management actions to address climate variability and change	Status of national and regional level consensus on contemporary issues of transboundary significance with respect to coastal habitat and land-based pollution management	TDA for SCS published in 2000 Special Issue of Ocean and Coastal Management on South China Sea published in 2013	2.6.1 National and regional level consensus on contemporary issues and problems, including the quantification of environmental compromises and the prioritization of problems and updated TDA	Updated and regionally endorsed Transboundary Diagnostic Analysis for the SCS marine basin published and disseminated at national and regional levels	Securing adequate and consistent inputs of expertise may be compromised if incentives for national and regional specialists to participate in work are inadequate
	Demonstrable use of state of coastal habitat reports in national and regional planning	Baseline national habitat reports developed and require periodic uptake	2.6.2. SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD)	Published state of coastal habitat reports	Adequate national and regional mechanisms for the step-wise review of information and data used in reporting
	Status of adoption by appropriate Ministers of an updated Strategic Action Programme for the South China Sea	Strategic Action Programme for the South China Sea endorsed inter-governmentally in 2008	2.6.3 National and regional consultative process to develop updated Strategic Action Programme SAP for adoption at the Ministerial level (Yr 5) including agreed	Endorsed Strategic Action Programme published	Minister-level commitment to adopt and sign the revised SAP

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
			monitoring and reporting mechanisms		
	Level of demonstrable use of the regional review on sea level rise, climate change, and episodic events in SAP formulation	Evolving understanding of sea level rise, climate change, and episodic events in East Asia but not applied in context of transboundary planning in the South China Sea	2.6.4 Prioritization of national management actions for incorporation into national policies and plans, in particular for climate variability and change and blue economy	Report of priority actions National policies and plans with demonstrable uptake of priority actions	Engaging appropriate technical expertise to identify priority national actions that achieve local benefit as well as high transboundary impact
	Number of updated National Action Plans, including institutional reform and sustainable financing strategies, adopted Number of policies, laws and regulations adopted to enable action plan implementation	National Action Plans for mangroves, coral reefs, seagrass and wetlands developed and implemented during period 2002-2008	2.6.5 Updated and adopted National Action Plans for mangroves, coral reefs, seagrass and wetlands, and land-based pollution including enactment of supporting legislation where required	Adopted National Action Plans and sustainable financing strategies accessible online Executive orders, provincial/local ordinances and by-laws	Ministerial level commitment to adopt updated management plans and enact supporting legislation
Component 2. Strength China Sea	hening knowledge-based actio	on planning for the management o	f coastal habitats and land-base	ed pollution to reduce environm	ental degradation of the South
3.1 Regional and sub- regional co-operation in the integration of scientific knowledge and research outputs with management and policy making	Status of the RSTC and the uptake of the scientific and technical advice it provides Continuity of participation of RSTC members in annual meetings	Lack of a formal mechanism for the sharing of science and technical knowledge relating to the South China Sea SAP implementation	3.1.1 Regional Scientific and Technical Committee of the SCS project functioning as a bridge between the scientific community and decision- makers [annual meetings]	RSTC Terms of Reference Annual meeting reports (documenting scientific and technical advice and participant lists)	Harnessing sufficient scientific and technical expertise across disciplines in coastal habitats, ecology, economic valuation, oceanography, land-based pollution and its impacts
	Number of central and provincial government agencies demonstrating use of scientific knowledge exchanged during biennial conferences	Limited application of evidence-based approaches by central and provincial government agencies	3.1.2 Knowledge exchanges between government and scientific community through biennial Regional Scientific Conferences	Published reports of the Regional Scientific Conferences Report on the uptake and use of regionally accumulated science	Strong and consistent support from government agencies to actively participate in scientific fora
	Number of Mayor's Round- Table meetings convened Number, scope & reach of communications to raise	Four Mayors Round-Table meetings convened during period 2005-2008 and documented as a key innovation	3.1.3 Best practice exchanges between local government officials and coastal managers on science-based management	Reports of Mayor's Round- Table Meetings, including documented evidence of behaviour change as a result	Strong and consistent support from local government officials to actively participate in fora aimed at stimulating knowledge sharing on best practice

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
	local official awareness of best practices	for improving local relevance of action planning and M&E	via annual Mayor's Round- Table meetings	of exposure to best practice guidance	management approaches and technologies
	Status of bilateral cooperation for transboundary resource management between (a) Cambodia and Vietnam and (b) Cambodia and Thailand Status of signature of Memoranda of Agreement	Bilateral cooperation between Cambodia and Vietnam initiated during the period 2007-2008 although this has stagnated as a result of a lack of regional coordination support	3.1.4 Memoranda of Agreement for joint management of 2 priority transboundary water areas agreed & implemented	Signed Memoranda of Agreement outlining agreed joint actions for transboundary coastal resource management	Commitment of central governments, provincial governments, and resources users to participate in consultative processes relating to the joint management of transboundary resources
	Extent of joint planning by both projects Number of best practices and lessons learned captured from the fisheries refugia project	Execution of the UNEP/GEF Fisheries Refugia project to commence in Q3 of 2016 through SEAFEDC and national fisheries agencies	3.1.5 Cooperation with the GEF fisheries refugia project and other relevant regional initiatives	Reports of joint planning meeting Published revised NAPs and SAP containing section on lessons from fisheries refugia project	Commitment of SEAFDEC and UNEP to actively and constructively cooperate on identifying and sharing best practices between projects
	Number of best practices identified Number of community organisations, local governments and industry receiving awarrds	Lack of mechanism to formally recognize and award communities, local governments and industry for innovation and generation of best practices for environmental management of the South China Sea	3.1.6 Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry [annual]	Documented examples of innovation and best practice by communities, local governments and industry Annual report of award project	Communities, local governments and industry initiatives result in innovative approaches Interest of stakeholders to participate in such a programme
3.2 Capacity for civil society and community organization participation in SAP implementation strengthened via operational partnership with GEF SGP	Number of GEF Small Grants Programme projects commissioned and implemented in support of SAP implementation	Need for strengthened mobilization of civil society and community organizations in SAP implementation	3.2.1 Cooperation with GEF SGP in the commissioning and implementation of an additional 12 community- based projects for SAP implementation	5 annual reports of SGP-SAP implementation partnership	There will be sufficient number of civil society and community based organisations to act as GEF SGP proponents in support of SAP implementation
	Extent and scope of inputs from CSOs and COs Number of NGO forums convened	Need for CSO and CO inputs to planning of an SCS-SGP partnership	3.2.2 CSO & CO inputs elicited for planning and M&E of the SCS-SGP partnership via annual NGO forums	Reports of NGO forum meetings	That linked capacity building initiatives are sufficiently well designed to build capacity of CSOs and COs for planning
	Number of SGP proponents trained to implement local actions in support of the achievement of SAP targets	Limited civil society and community organisation experience and capacity for	3.2.3 Training program on science and management of SCS coastal habitats and resources for SGP proponents	Training modules for SGP proponents developed and accessible online	Training materials are sufficiently well planned and presented in local languages to

Outcomes	tcomes Indicator(s) Baseline Targets End of Project Source of Verification		Risks and Assumptions		
		coastal habitat and land-based pollution management			meet needs of the staff of SGP proponent organisations
	Number of public-private partnerships identified and documented	Many private sector oganisations operate corporate social and environmental responsibility programmes but they are not aligned with SAP implementation	3.3.1 Review of past and ongoing public-private partnerships for coastal management in SCS region and case studies for effective private sector engagement	Review of report on public- private partnerships published	Engaging appropriate expertise to link information on corporate social responsibility to SAP targets and implementation priorities
	Number of opportunities for private sector investment in SAP implementation identified	Significant commercial enterprise is conducted in waters of the South China Sea, particularly in the areas of oil and gas, fisheries and tourism	3.3.2 Identification of opportunities for private sector investment (e.g. oil and gas, fisheries, tourism) in implementation of the updated SAP	Letters of commitment from private sector entities with regards to support for SAP implementation	Communications and engagement strategies sufficiently well planned to establish interest among private sector entities in SAP implementation
3.3 Relationships between central and local governments and the private sector strengthened and formalized	Status of agreement on financial arrangements for private sector and donor investment in the implementation of the revised Strategic Action Programme	Low-level mobilization of the private sector in environmental investment planning in the South China Sea	3.3.3 Two partnership forums to facilitate cooperation with private sector on implementation of the updated SAP	Letters of investment commitment from private sector partners and donors	Limited private sector interest or alignment of donor investment strategies with revised SAP targets and actions
	Number of countries with endorsed National Action Plans, including institutional reform and sustainable financing strategies	Guidelines for assessing the economic impacts of land-based pollution developed but not yet applied as part of benefit-cost analysis of pollution mgmt. in the SCS	3.3.4. Updated and adopted National Investment Plans for land-based pollution and habitat management in the SCS [Yr 5]	6 endorsed National Investment Plans published and disseminated nationally and regionally	Availability of information and data to enable comparison of cost of action versus cost of inaction as part of investment planning approach
	Status of agreement among participating countries on a sustainable financing approach for regional actions	Lack of sustainable mechanism to finance regional support actions including M&E	3.3.5. Regional financial mechanism for land-based pollution and habitat management [Yr 5]	Endorsed regional report on sustainable financing of regional actions for land- based pollution in the SCS	Level of commitment of participating countries, development partners, and donors to invest in coordinated action
3.4 Revitalization of regional mechanisms for communications, knowledge exchange, and information and	Number of multi-media and knowledge products produced	The SCS project produced an extensive range of knowledge products, technical guides, and training and awareness materials	3.4.1 A variety of multi- media information and knowledge products based on SCS SAP implementation communications strategy	Multi-media information and knowledge products published and accessible online	Sufficient creative input can be harnessed to produce products that have high impact on stakeholders

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
data management and sharing	Status of knowledge tool development to support evidence-based coastal and marine management and spatial planning	Transboundary coastal and marine mgmt. spatial planning constrained by lack of a regionally coordinated approach to harnessing sectorial expertise and knowledge	3.4.2 Regionally appropriate knowledge tools developed to support decision-making and planning	Published synthesis reports on: climate variability in coastal systems; hazards and coastal area planning; blue forests and livelihoods; and land and marine tenure and use designation	Limited scientific understanding of the role climate variability and anthropogenic induced change on the SCS marine basin may result in climate issues dominating scientific & technical discussions
	Number of users, volume of content accessed, and online visibility of the SCS website and associated databases	Need for media platforms and targeted communications in support of efforts to harness support for inter-ministerial coordination and policy and planning elements of SAP implementation and revision	3.4.3 The SCS project web portal and clearing house mechanism and associated regional databases online, updated and linked to IW- Learn and other GEF Knowledge management systems	Regional and national portals, GIS and meta-databses, repository of best practices, lessons learned and results accessible online via <www.unepscs.org></www.unepscs.org>	Internet connectivity in national and regional offices is adequate to support the efficient online compilation and sharing of information and data
	Number of IW:LEARN experience notes published	Limited regional and global sharing of information on best practices and lessons learned from investments in the SCS despite for example publication of a complete Special Issue of an academic journal on the progress to date	3.4.4 Active engagement with GEF IW:LEARN [1% of project resources] including participation in IW conferences and 3 experience notes	Published experience notes	Retention of national and regional level staff required to resource the documentation of experiences and lessons learned as IW:LEARN experience notes
3.5 Agreed arrangements for strengthened regional cooperation in the management of the marine and coastal environment of the South China Sea	Number of Regional Task Force meetings Continuity of participation of nationally nominated members	Regional Task Force on Legal Matters established through SCS project but presently not functioning	3.5.1 Biannual meetings of the Regional Task Force on Legal Matters	Reports of the meetings of the Regional Task Force on Legal Matters	National government commitment to ensure continuity of participation of nominated members
	Number of National Working Group meetings Continuity of participation of nationally nominated members	National Working Groups established through SCS project but presently not functioning	3.5.2 National Working Groups on established and functional	Reports of the meetings of National Working Groups	Adequate incentive structures are in place nationally to secure adequate expertise to consider matters relating to cooperation
	Status of agreement on identified process	Framework process developed but requires national and regional consultation	3.5.3 Process for development of a proposed arrangement for regional cooperation defined and planned	Report outlining agreed process	Adequate planning and facilitation to support consensus building
	Extent of national stakeholder input to drafting	SAP formulation benefited from an emphasis on consensual planning and decision making	3.5.4 National stakeholder inputs to drafting of instrument for strengthened	Reports of national stakeholder consultation process	Adequate planning and facilitation to elicit national

Outcomes	Indicator(s)	Baseline	Targets End of Project	Source of Verification	Risks and Assumptions
	phase of instrument for cooperation		regional cooperation facilitated via national consultations		inputs required to support consensus building
	Status of adoption of the instrument	Participating countries agreed in the SAP, and in endorsing the PIF for this project, to explore the development of an instrument for strengthened regional cooperation	3.5.5 Adopted instrument for strengthened regional cooperation	Adopted instrument	Government commitment to cooperate on matters relating to coastal and marine environmental management in the South China Sea basin

SCSSAP PSC.1/3

APPENDIX 2. WORK-PLAN AND TIMETABLE

To be included once adopted by the 1st Steering Committee meeting

APPENDIX 3. BUDGET

To be included once adopted by the 1st Steering Committee meeting

APPENDIX 4. TERMS OF REFERENCE

To be included once adopted by the 1st Steering Committee meeting

APPENDIX 5. MONITORING AND EVALUATION PLAN

BACKGROUND

The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in **Appendix 1** includes Specific, Measurable, Achievable, Relevant and Time-bound (SMART) for each expected outcome as well as mid-term and end-of-project targets. These indicators will be the main tools for assessing project implementation progress and whether project results are being achieved. Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.

The Project Steering Committee (PSC) will be responsible for proposing any necessary amendments to the M&E plan during project implementation. Indicators and their means of verification may also be fine-tuned by the PSC. Day-to-day project monitoring is the responsibility of the PCU but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the Senior Project Manager to inform the Interagency Coordination Group of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion. The Project Steering Committee will receive periodic reports on progress and will make recommendations to the PCU concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP, UNOPS and GEF policies and procedures is the responsibility to the Task Managers in UNEP-GEF. The Task Managers will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Senior Project Manager will also be responsible for initial screening of the financial and administrative reports from partners prior to their submission. Progress vis-à-vis the delivery of agreed project outputs will be assessed by the PSC at least annually. Project risks and assumptions will be regularly reviewed both by project partners and the PCU. Risk assessment and rating is an integral part of the annual Project Implementation Review (PIR), preparation of which will be the responsibility of the Senior Project Manager. The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR and the PSC shall clear the PIR prior to its final submission. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

A mid-term review will be conducted by UN Environment Task Managers in consultation with the Senior Project Manager and the outcomes reported to the Project Steering Committee. The purpose of the mid-term review is to identify corrective measures and/or changes to the intended work plan The MTE will focus on the following: (i) level of progress in attaining the project objectives stated in the Results Matrix; (ii) level of acceptance of procedures developed under the project; and (iii) degree of effectiveness of the internal and UNEP monitoring and supervision system. An independent terminal evaluation will take place at the end of project implementation. An independent terminal evaluation will take place at the report to the GEF Evaluation Office not later than 6 months after the completion of the evaluation.

Monitoring Responsibilities and Events

The SCS SAP project is implemented by UN Environment, and as such activities will UNEPs' policies and procedures. Project oversight to ensure that the project meets UN Environment and GEF policies and procedures is the responsibility to the Task Manager in UN Environment -GEF. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications. At the first meeting of the PSC the Senior Project Manager will present the Monitoring and Evaluation Plan.

<u>Day to day monitoring</u> of the overall project implementation progress will be the responsibility of the PCU based on the Project's Annual Work Plan and its indicators. The Senior Project Manager will inform UN Environment 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 Senior Project Manager will fine-tune the progress and performance/impact indicators of the Project in consultation with the full PCU and with support from the Inter-Agency Co-ordination Group composed of UNEP, UNOPS and SEAFDEC. The Inter-Agency Co-ordination Group will oversee monitoring of the entire project. The established indicators 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 at the half-way point will be revised as part of the mid-term evaluation. All amendments and planning processes undertaken by the PCG will be subject to review and approval by the Project Steering Committee.

<u>Periodic monitoring of implementation progress</u> will be undertaken by through the provision of quarterly reports, prepared by the PCU in collaboration with SEAFDEC and UNOPS and submitted to UNEP. In turn each national partners will also prepare quarterly reports, to be reviewed by UNOPS and the Senior Project Manager. The Project Steering Committee will receive periodic reports on progress and will make recommendations to the PCU concerning the need to revise any aspects of the Results Framework or the M&E plan. Furthermore, specific meetings can be scheduled between the Inter-Agency Co-ordination Group, PCU and executing partners and other pertinent stakeholders as appropriate and relevant (e.g. Steering Committee members, partners, etc). Such meetings will allow parties to troubleshoot any problems pertaining to the Project in a timely fashion and to ensure smooth implementation of project activities.

Project Monitoring Reporting

The Senior Project Manager in conjunction with the PCU team, UNOPS and SEAFDEC will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Table 1 summarizes project monitoring reporting.

Table 1 Summary of project monitoring reporting.

M&E Reporting	Timing	Responsibility
Inception Report - Detailed workplan Detailed budget	Draft developed. Final version following inception	PCU with inputs from SEAFDEC, UNOPS and
 Inception Phase Regional Implementation Report National Implementation Reports (for each 6- participating country) 	workshop	
 Annual Workplan and Budget revision List of activities to be implemented each year Timeline 	Draft for first year developed. Final version after inception workshop	PCU, SEAFDEC and UNOPS, in consultation with UNEP
 Quarterly and Annual Financial report Project expenditures according to established project budget and allocations; Budgetary plans for the next quarter; Requests further cash transfers; Requests budget revision as necessary; and 	Quarterly, within 15 days of each reporting period	Executing Agencies- coordination by PCU

Mð	ÈE Reporting	Timing	Responsibility
-	Inventory of non-expendable equipment procured		
	for project		
An	nual Progress Reports (Project Implementation		
Re	view - PIR)		
-	Consolidated review of progress and outputs of		
	project actions;		
-	Progress against Annual work plan;	20 dama after the	Executing Agencies-
-	Best practices and lessons learnt;	so days after the	consultation UN
-	Progress plans and budgetary requirements for the	end of the period	Environment
	following reporting period;		
-	General source of information for general project		
	reporting; and		
-	PIR		
Pro	ocurement Plan	Annually	Executing Agencies-
-	Procurement plan for upcoming 12 months	Annuarry	coordination by PCU
Ext	ternal Audit (SEAFDEC only)	Annually and at	Independent auditor -
-	Audit reports of project accounts and records	project completion	hired by SEAFDEC
Co	-financing report		
-	Co-financing provided to the project; and	Annually	Executing Agencies-
-	Co-financing inputs against GEF approved	runnanry	coordination by PCU
	financing plan		
Mi	d-term Review	Owenter	Senior Project Manager,
-	Detailed review of project management, actions;	Quarter	SEAFDEC, UNOPS, UN
-	Outputs and impacts at mid-term;	following project	Environment with inputs
-	Recommendations for remedial action and/or	mid-term	from executing partners
	revision of work plans as appropriate		and SC members
Pro	oject Completion Report		
-	Consolidated review of project effectiveness,		
	progress towards outcomes and technical outputs of	Two months after	PCUwith input from
	project actions;	project completion	Executing Agencies
-	Final best practices and lessons learnt;		
-	Report on project expenditures		
Tei	rminal Evaluation		
-	Independent evaluation of project management,		
	actions, outputs and impacts;		- hired by UN
-	Sustainability analysis	Within 6 months of	Environment as GEF
-	Project effectiveness;	project completion	agencies
-	Technical outputs;		
-	Lessons learned;		
-	Progress towards outcomes		

Learning and Knowledge Sharing

Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks including IW:LEARN and other fora. In addition:

• the project will participate, as relevant and appropriate, in UN Environment/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics; and

• 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. Identifying and analyzing lessons learned is an ongoing process, and the need to gather and communicate knowledge is one of the project's central contributions. Lessons learned will be monitored for on a quarterly basis and shared at least once every 12 months. UN Environment shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned.

Summary of Indicative M&E Financing

This amount below and in the detailed budget represents funds dispersed on baseline activities, data and information gathering in support of the various reports and funds expected to be dispersed on M&E related activities during the course of the project.

Monitoring and	UNOPS	SEAFDEC	Co- financing	Total component		
Evaluation activities	GEF Funding (US\$)	GEF Funding (US\$)	(US\$)	Cost (US\$)		
Mid-term Review	0	45,000	tbc	45,000		
Terminal evaluation (TE)	0	60,000	tbc	60,000		
Effective M&E by the PCU	149,970		tbc	149,970		
Audits		17,500	tbc	17,500		
TOTAL M&E TOTAL	149,970	122,500	tbc	272,470		

APPENDIX 6. CO-FINANCING CONTRIBUTION CALCULATION AND REPORTING

Co-financing Contribution Calculation and Reporting

The overall budget for the UNEP/GEF SCS SAP Project is USD 98,451,948, of which USD 15,000,000 will be financed by the GEF Trust Fund through the GEF International Waters focal area, with a significant total co-financing of USD 83,451,948. The project budget at the time of project endorsement is shown in Table 1.

The majority of the co-financing comes from the participating countries with a combined total in-kind co-financing of USD 81,097,585. This is mostly in-kind co-financing based: 1) on estimated contributions of individual's time, local transport, office space and facilities, and domestic and international communications in support of project implementation, and 2) from ongoing and planned initiatives of participating countries in coastal areas of the South China Sea which align with goals and targets of the project area.

In cash and in-kind co-financing of USD 1,854,363 will be provided by COBSEA while UNEP direct in-kind co-financing is estimated at USD 500,000 over the project period which will be provided through various divisions (DEPI, DEWA, and ROAP).

Project Cost	USD	%
Cost to GEF Trust Fund	15,000,000	15
Cost to Governments (in-kind)	81,097,585	83
Cost to UNEP (in-kind)	500,000	.5
Cost to COBSEA (in cash and in-kind)	1,854,363	1.5
Total	98,451,948	100

Table 1 Summary of Funding for the UNEP/GEF SCS SAP Project

Monitoring and Reporting on Project Co-financing

It is a requirement of the GEF that co-financing be reported and monitored by source, by type, and by the stage of the Project Cycle. Co-financing is a key principle underlying GEF efforts to have a significant positive impact on the global environment. Co-financing is defined as "the project resources that are committed by the GEF agency itself or by other non-GEF sources and which are essential for meeting the GEF project objectives" (GEF/C.20/6/Rev.1). Sources of co-financing in GEF projects include:

- The agency's own co-financing (i.e., from the GEF implementing agencies e.g. UNDP, UNEP);
- Government co-financing (counterpart commitments) e.g., for baseline or foundational activities upon which the project would build or without which the project could not be implemented;
- Contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector, and beneficiaries.

The Project Implementing Agency and Executing Agencies are required to inform the GEF Secretariat whenever there is a potentially substantive co-financing change (i.e., one affecting the project objectives, scale, scope, strategic priority, conformity with GEF criteria, likelihood or project success, or outcome of the project). As such, it is important for projects to develop a user-friendly system for tracking and reporting on co-financing.

A significant project management innovation of the UNEP/GEF South China Sea Project is the procedure developed and adopted by the project for tracking and reporting co-financing. The procedure primarily answers the problem encountered by the project on how to measure in-kind co-financing based on individual's time as few institutions or organizations of participating countries required their individuals to maintain time sheets. The procedure, which involved three simple steps: 1) identification of in-kind inputs; 2) agreement on a regional coefficient for the value of time; and 3) reporting by Executing Agencies of time, has proved to be effective in calculating and tracking the project's co-financing commitments.

The UNDP/GEF Yellow Sea Project, the GEF Pacific IWRM Project and the UNEP/GEF Fisheries Refugia Project adopted the procedure and steps followed by the UNEP/GEF South China Sea Project on tracking in-kind co-financing, particularly the agreement on a regional coefficient to value time and the identification of the elements of in-kind co-financing that is amenable to independent verification.

Project In-Kind Co-financing from Governments

At the time of endorsement of the UNEP/GEF SCS SAP Project, the total in-kind co-financing from participating countries is USD 81,097,585, mostly based: 1) on estimated contributions of individual's time, local transport, office space and facilities, and domestic and international communications in support of project implementation; and 2) from ongoing and planned initiatives of participating countries in coastal areas of the South China Sea which align with goals and targets of the project area. The summary breakdown of project co-financing estimates per participating countries is shown in Table 2.

Table 2	Summary o	of in-kind	co-financing	estimates	from	governments	of	participating	countries	of	the
	UNEP/GEF	SCS SAP	Project								

	Government In-kind (
Country	National Coordination	Ongoing and Planned	Total (USD)		
	and Planning*	National Initiatives			
Cambodia	1,670,733	2,792,075	4,462,808		
China	2,884,640	8,000,000	10,884,640		
Indonesia	3,109,920	17,063,050	20,172,970		
Philippines	3,224,320	16,568,935	19,793,255		
Thailand	-	18,102,309	18,102,309		
Vietnam	-	7,681,603	7,681,603		
	10,889,613	70,207,972	81,097,585		

* Based on estimated contributions of individual's time, local transport, office space and facilities and domestic and international communications

Monitoring In-Kind Co-Financing from Governments

Experience of other GEF projects suggests that significant in-kind co-financing is contributed to projects directly by individuals either through: participation in meetings; organization of project activities and networking with other projects and programmes; additional unpaid work required to get the job done; technical backstopping; and provision of specialized knowledge and information, particularly after regular working hours.

Verifying such in-kind contributions is difficult if not impossible as very few organizations or individuals maintain detailed timesheets. Estimating the value of time spent by individuals on project activities is complicated by factors including the seniority or actual salaries of individuals and different economic conditions in the participating countries (i.e. an individual's time in one country may be valued much higher or lower than an individual in a neighboring country).

These problems on how to verify and value time of individuals have been addressed by other GEF projects in the Asia Pacific region such as the GEF projects mentioned earlier. The approach adopted has been to establish a regional standard co-efficient as a value of 1 person day. The co-efficient agreed was an inclusive costing of salary and benefits, plus office support costs that was applied to all individuals, from all countries, regardless of their individual level of seniority or actual salary. The co-efficient or regional standard "daily rate" was agreed through consideration of:

- The government salary scales of the participating countries,
- Supporting costs in the participating countries, including social benefits, office and office facilities, and supporting systems of the institutions; and
- Average salary of staff of the project executing agencies.

To illustrate the approach used to value the in-kind co-financing is the time spent of 50 individuals in a two-day national stakeholder consultation workshop at a regional standard rate of US\$140 as follows:

• 1 (workshop) x 2 (days) x 50 (persons) x US\$140 (co-efficient)/person/day = US\$14,000

The use of a co-efficient obviously undervalues the real co-financing in some countries and overvalues it in others, but obviates the necessity for maintaining detailed records in national currencies, all of which float on the international currency exchange market. Developing such a co-efficient or standard daily rate for use in the

UNEP/GEF SCS SAP Project would require information regarding government salary scales from each participating country and agreement of the committee on a suitable rate.

As to the elements of in-kind co-financing that are amenable to independent verification for the UNEP/GEF SCS SAP Project include:

- Costs of individual's time in meetings of the National Technical Working Group and Inter Ministry Committee meetings
- Costs of individual's time in meetings of the National Committees and Sub-Committees of the components and sub-components
- Costs of individual's participation in meetings of: the SCS SAP Project Steering Committee; the Regional Scientific and Technical Committee; the five regional working groups; and the two Task Forces.

Monitoring Co-Financing from Supporting Organizations

A significant proportion of the anticipated project co-financing relates to ongoing and planned initiatives of participating countries in coastal areas of the South China Sea which align with the goals and targets of the project area. As these activities have largely been designed to directly complement the GEF project and are essential for meeting the GEF project objectives, there is a critical need for these inputs to be monitored and reported on. It is a requirement of the legal instrument to be developed that Specialized Executing Agencies submit financial and progress reports to the SCS SAP Project Coordination Unit on a quarterly basis, including detailed information on co-financing realized from supporting organizations.

In considering a method for tracking inputs from supporting organizations, the true value of the outputs produced and outcomes achieved by organizations in the execution of supporting activities is perhaps impossible to determine. This would require information about the time spent by staff of partner organizations on project activities, level of technical and administrative support provided, and some estimate of the value of the partners own network of supporting organizations that contributed to the successful of tasks. It is suggested by the SCS SAP Project Coordination Unit that, as this type of co-financing is included in individual project budgets against on-the-ground activities and deliverables, successful completion of the identified tasks and production of outputs should deem the co-financing commitment to have been met or "realized".

Such an approach will require effective in-country communication between Specialized Executing Agencies and the in-country staff or focal points for the ongoing and planned initiatives of supporting and partner organizations. This will be necessary for the timely reporting of information regarding the conduct and completion of supporting/complementary activities in quarterly project progress reports. This information once received by the SCS SAP Project Coordination Unit will be compiled in a regional database, analyzed, and presented to annual meetings of the SCS SAP Project Steering Committee.

Reporting In-Kind Co-Financing

The SCS SAP Project Coordination Unit has developed a framework for reporting on in-kind contributions of individuals' time to project activities as part of the quarterly progress report. The Specialized Executing Agencies will be required to include in each quarterly report a listing of all meetings convened, their duration and location, agenda, report, and a list of participants. Similarly participation of support staff in the execution of technical and field activities will be reported in quarterly progress reports. Cash co-financing of meetings and activities will also be recorded on a quarterly basis.

This information once received by the SCS SAP Coordination will be compiled in a regional database, calculated using a regional standard co-efficient rate, analyzed and presented to annual meetings of the SCS SAP Project Steering Committee.

To be consistent and in line with the implementation of the fisheries component of the Strategic Action Programme (SAP) through the UNEP/GEF Fisheries Refugia Project, which uses a regional standard co-efficient of US\$160 per person/day, the UNEP/GEF SCS SAP Project proposes to follow the same regional standard co-efficient of US\$160 per person/day in calculating the in-kind co-financing of the project.

The use of co-efficient in the calculation of in-kind co-financing will be presented to the SCS SAP Project Steering Committee for consideration and approval. After which, the in-kind co-financing will be calculated. Below is the template for calculation of co-financing.

TEMPI	ATE FOR CA	LCULATION	OF PROJECT CO-FINANCI	NG								
Count	y name:											
Quartarly			Title of Activity	Calculated Co-finance								
#	Quarterly No. Date/Period	No. of Days		No. of Participants	Co-Efficient	In-Kind \$	Cash \$	Sources	- Venue / Location	Convened by	Remarks	
1												
2												
3												
4												
5												
CANADI												
SAMPLES ON HOW TO IMPOT												
SAIVIPLI	S ON HOW I	O INPUT										
SAIVIPLI	Ouarterly	O INPUT				Calculat	ed Co-finan	ce		Venue /	Convened	
#	Quarterly No.	O INPUT Date/Period	Title of Activity	No. of Days	No. of Participants	Calculat Co-Efficient	ed Co-finan In-Kind \$	ce Cash \$	Sources	Venue / Location	Convened by	Remarks
# 1	Quarterly No.	Date/Period	Title of Activity Socio-economy study of lobster fisheries in Pahang and Johor 2018	No. of Days	No. of Participants 5	Calculat Co-Efficient 160	ed Co-finan In-Kind \$ 4,000.00	ce Cash \$ 500.00	Sources DOF	Venue / Location	Convened by	Remarks
# 1	Quarterly No.	Date/Period	Title of Activity Socio-economy study of lobster fisheries in Pahang and Johor 2018	No. of Days	No. of Participants 5	Calculat Co-Efficient 160	ed Co-finan	ce Cash \$ 500.00	Sources DOF	Venue / Location 1. Pahang (Kuala Rompin, Rompin Lama)	Convened by DOF	Remarks
# 1	Quarterly No. Q1/2018	Date/Period	Title of Activity Socio-economy study of lobster fisheries in Pahang and Johor 2018	No. of Days	No. of Participants 5	Calculat Co-Efficient 160	ted Co-finan	ce Cash \$ 500.00	Sources DOF	Venue / Location	Convened by DOF	Remarks