



# **Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand (SCS SAP Project)**

**First Meeting of the Regional Scientific and Technical Committee**

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## **REGIONAL AND NATIONAL ACTIVITIES UNDER COMPONENTS 2 AND 3**



## REGIONAL AND NATIONAL ACTIVITIES UNDER COMPONENTS 2 AND 3

### 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

1. 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 decision-making; 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

2. 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.

3. 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.

**Table 1. Outputs, key actions/targets and deliverables for Outcome 2.1.**

Outputs	Targets/Key actions	Deliverables
2.1.1. Validation of existing or improved algorithms with on-site data	<ul style="list-style-type: none"> <li>Support site activities and ensure latest remote sensing algorithms and tools to provide data on coastal site</li> <li>Create partnerships with initiatives and projects leading innovation on remote sensing (i.e. with GRID, WCMC, latest research)</li> <li>Training and support to national teams</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Training/Workshop</li> </ul>

Outputs	Targets/Key actions	Deliverables
2.1.2 Mechanism for collection and exchange of regional coastal habitat and pollution information and data established	<ul style="list-style-type: none"> <li>Regional coordination to ensure all Component 1 site activities collection of data are integrated into a regional meta-database</li> <li>GIS and meta-database of SCS coastal habitat information</li> <li>Partnerships with national regional organizations to coordinate information and data (i.e. COBSEA, PEMSEA)</li> <li>Partnership with IW:LEARN Data and Information (DIM) working group and synergies with other LMEs, as well as links to SDG reporting</li> </ul>	<ul style="list-style-type: none"> <li>Agreed site characterisation forms for the compilation of regionally comparable coastal habitat information and data</li> <li>GIS and meta-database online and routinely updated by SAP implementation partners</li> </ul>
2.1.3 Role of coastal habitats of the South China Sea in climate change adaptation and the sequestration and storage of carbon	<ul style="list-style-type: none"> <li>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)</li> <li>Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats</li> <li>Methodology to integrate climate change aspects into TDA and SAP</li> </ul>	<ul style="list-style-type: none"> <li>Published report on the capture and storage of carbon by coastal habitats, including national and regional strategic planning recommendations, shared online</li> <li>Volume of CO2 captured and stored by SCS habitats defined</li> <li>Extent of uptake of information on carbon sequestration and storage used in mgmt. planning</li> </ul>
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		<ul style="list-style-type: none"> <li>Review report published and shared regionally</li> <li>Communications on review outcomes published by media outlets and syndicated via LME LEARN</li> </ul>
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	<ul style="list-style-type: none"> <li>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)</li> <li>Also review harmonization of joint reporting to other commitments (SDGS, CBD etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Review assessment report with contribution from all countries</li> <li>Proposal and recommendations on sustainable solution to support monitoring and assessments (to be integrated in SAP)</li> </ul>
2.1.6 A regional system for periodic monitoring of the state of coastal habitats of the South China Sea	<ul style="list-style-type: none"> <li>Countries (6) contribute to compiled meta-database on existing data</li> <li>No of recommendations and innovative approaches to support monitoring and assessments</li> </ul>	

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

4. 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.

5. 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”*

6. 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:

7. 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 hotspots, 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.

**Table 1. Outputs, key actions/targets and deliverables for Outcome 2.2.**

Outputs	Targets/Key actions	Deliverables
2.2.1 Updating the nutrient carrying capacity model for the SCS marine basin and integration into SCS GIS	<ul style="list-style-type: none"> <li>Building upon SCS project nutrient carrying capacity assessment and UNEP Global Nutrient Project (pilot project in Manila Bay and Laguna de Bay), replicate exercise in key areas/hotspots</li> </ul>	<ul style="list-style-type: none"> <li>Nutrient carrying capacity developed and implemented</li> <li>Communications products available for regional and global sharing</li> <li>1 * IW Experience Note</li> </ul>
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	<p>Complementing the work of the National Report and NAP update (see output 2.6.5) on land-based pollution;</p> <ul style="list-style-type: none"> <li>Overview of existing data and models on key contaminants, building on existing initiatives. Fully integrate all new national and regional research</li> <li>Review commitments to Global and regional obligations with regards to pollution and provide recommendations</li> <li>Regional Report as contribution to TDA and SAP revision</li> </ul>	<ul style="list-style-type: none"> <li>Published report shared nationally and regionally</li> <li>Pollution hotspot site characterization templates developed</li> <li>Hotspot information accessible online</li> <li>Science-Policy Interface and development of policy briefs and recommendations</li> </ul>

Outputs	Targets/Key actions	Deliverables
		1 * IW Experience Note
2.2.3. Quantification of effluent volumes and contaminant loadings from coastal aquaculture to the SCS marine basin	<ul style="list-style-type: none"> <li>Effluent from aquaculture and mariculture operations identified as key threat to dominant coastal biomes</li> <li>Quantification of effluent volumes and contaminant loadings from coastal aquaculture</li> </ul>	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

8. 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.

**Table 3. Outputs, key actions/targets and deliverables for Outcome 2.3**

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 <ul style="list-style-type: none"> <li>Agree on mechanism to fully share National best practices and contribute to regional and global platforms</li> <li>Review best practices also related to work on Blue/Green and circular economy initiatives and Sustainable Consumption and Production</li> <li>Number of best practice technologies and measures tested, documented and shared. Including how these will contribute to the SDGs</li> </ul>	<ul style="list-style-type: none"> <li>Catalogue of best practice technologies and management approaches for land-based pollution published and accessible online</li> </ul>
2.3.2 Review of legislative and institutional frameworks for land-based pollution and habitat management in participating countries	<ul style="list-style-type: none"> <li>National level review as part of the NAPs, under coordination of the IMC</li> <li>Regional Review of legislative and institutional frameworks for land-based pollution and habitat management</li> <li>Identification of gaps and needed reforms</li> </ul>	<ul style="list-style-type: none"> <li>Review published and shared regionally</li> <li>Gaps identified and institutional, policy reforms identified (see output 2.3.3)</li> </ul>
2.3.3. Harmonized national Standard Operating Procedures for land-based	<ul style="list-style-type: none"> <li>Update on gaps and needs for SOPs in line with regional and global agreements</li> </ul>	<ul style="list-style-type: none"> <li>Regional guidelines on Standard Operating Procedures published</li> </ul>

Outputs	Targets/Key actions	Deliverables
pollution control and management [including agreed sediment, biota, & water quality criteria]	<ul style="list-style-type: none"> <li>No of SOPs developed and adopted</li> </ul>	<ul style="list-style-type: none"> <li>Adopted National Standard Operating Procedures available online</li> </ul>
2.3.4. Revised national/provincial policies and supporting regulations for land-based pollution and habitats developed, enacted and implemented	<ul style="list-style-type: none"> <li>Support to countries to update/develop new national/provincial policies and supporting regulations for land-based pollution and habitats</li> <li>Reflect gaps, reforms and other recommendations into revised NAPs and SAP</li> </ul>	<ul style="list-style-type: none"> <li>6 national reports on policy and legal aspects of land-based pollution management</li> <li>Endorsed policy and executive orders, provincial/local ordinances and by-laws</li> </ul>

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

9. 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. Costanza<sup>1</sup> *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.

10. Since this work was conducted, new approaches have been applied through several initiatives including the [Economics of Ecosystems and Biodiversity](#) (TEEB), the UNEP GEF [Blue Forests project](#), 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.

**Table 4. Outputs, key actions/targets and deliverables for Outcome 2.4**

Outputs	Targets/Key actions	Deliverables
2.4.1 Expanded datasets and estimates of economic valuation information on the	<ul style="list-style-type: none"> <li>Review/revise economic evaluation methodology in consideration of new approaches</li> <li>Implement and update Economic Values of coastal habitats data for inclusion in revised SAP</li> </ul>	<ul style="list-style-type: none"> <li>Published methodology</li> <li>National/Regional report with economic evaluation integrated into SAP</li> </ul>

<sup>1</sup> 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
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	<ul style="list-style-type: none"> <li>Partnerships established with key regional organizations (PEMSEA, COBSEA, ASEAN) on current status, gaps and needs for enhancing blue and circular economy in the region</li> <li>Compilation of good examples from within and beyond the region where relevant</li> <li>Recommendations on actions to further support SAP implementation</li> </ul>	<ul style="list-style-type: none"> <li>Report on good examples, and recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management</li> <li>SAP revision incorporated blue and circular economy</li> </ul>

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

11. 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

**Table 5. Outputs, key actions/targets and deliverables for Outcome 2.5**

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	<ul style="list-style-type: none"> <li>Compilation of regional best-practices (from SCS project and other initiatives)</li> <li>Best practices on innovative management approaches and nature based solutions</li> <li>Coordination with national NTWG and Committees to document best practices for site activities</li> <li>Updated best-practices online</li> </ul>	<ul style="list-style-type: none"> <li>Catalogue of best practices accessible online</li> <li>Communications products on best practices produced and syndicated online</li> </ul>
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	<ul style="list-style-type: none"> <li>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;</li> <li>Implement training, study tour and exchange initiatives in all countries</li> </ul>	<ul style="list-style-type: none"> <li>Reports of study tour and exchange initiatives</li> <li>Annual reports of best practice examples of community level inputs to SAP implementation initiatives</li> </ul>

## 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

12. 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

[TDA/SAP Methodology](#), 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.

**Table 6. Outputs, key actions/targets and deliverables for Outcome 2.6**

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	<p>TDA for SCS published in 2000.</p> <ul style="list-style-type: none"> <li>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)</li> <li>TDA drafted for review by RSTC and regional working groups, as well as peer review process</li> <li>TDA adopted at Steering Committee and presentation to COBSEA's IGM</li> </ul>	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)	<ul style="list-style-type: none"> <li>Methodology/Guidelines for update of national habitat reports</li> <li>Partnership with key regional institutions and projects to combine resources and information</li> <li>Update of national habitat reports</li> <li>Regional synthesis/ SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD)</li> </ul>	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	<ul style="list-style-type: none"> <li>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</li> <li>Incorporation of additional elements (depending on information availability) including blue and circular economy and nature-based solutions</li> <li>SAP drafted for review by RSTC and regional working groups, as well as peer review process</li> <li>SAP adopted at Steering Committee and presentation to COBSEA's IGM</li> <li>SAP monitoring framework</li> <li>Contribution assessed of SAP implementation to the SDGs and CBD Post 2020 Framework</li> </ul>	<ul style="list-style-type: none"> <li>Adoption by appropriate Ministers of an updated Strategic Action Programme for the South China Sea</li> <li>Endorsed Strategic Action Programme published</li> </ul>
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	<ul style="list-style-type: none"> <li>Recommendations and project concepts for SAP implementation including regional level implementation, incorporation into national planning (financial mechanisms addressed in outcome 3.3)</li> </ul>	<ul style="list-style-type: none"> <li>Recommendations, actions and project concepts for SAP implementation</li> </ul>
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	<p>Linked with 2.6.2</p> <ul style="list-style-type: none"> <li>Methodology developed for NAP update including preliminary information on climate change, marine litter and other emerging issues</li> <li>Incorporation of additional elements (depending on information availability) including blue and circular economy and nature-based solutions</li> </ul>	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

13. 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

14. 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 policy-makers. 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.

**Table 7. Outputs, key actions/targets and deliverables for Outcome 3.1**

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]	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>RSTC Terms of Reference</li> <li>Annual meeting reports (documenting scientific and technical advice and participant lists)</li> </ul>

Outputs	Targets/Key actions	Deliverables
	<ul style="list-style-type: none"> <li>Annual Meetings of the RSTC and additional ad-hoc online meeting as requested</li> <li>Oversight of the scientific and technical elements of the project, providing sound scientific and technical advice</li> </ul>	
3.1.2 Knowledge exchanges between government and scientific community through biennial Regional Scientific Conferences	<ul style="list-style-type: none"> <li>Biennial Regional Scientific Conferences</li> </ul>	<ul style="list-style-type: none"> <li>Published reports of the Regional Scientific Conferences</li> <li>Report on the uptake and use of regionally accumulated science</li> </ul>
3.1.3 Best practice exchanges between local government officials and coastal managers on science-based management via annual Mayor's Round-Table meetings	<ul style="list-style-type: none"> <li>Number of Mayor's Round-Table meetings convened</li> <li>Number, scope &amp; reach of communications to raise local official awareness of best practices</li> </ul>	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	<ul style="list-style-type: none"> <li>Promote joint actions at the national level between SCS SAP and FR</li> <li>Ensure FR Focal Points participate in National meetings</li> <li>Coordinate inputs from the FR into the revised TDA and SAP</li> </ul>	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]	<ul style="list-style-type: none"> <li>Design and implement Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry</li> <li>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</li> </ul>	Documented examples of innovation and best practice by communities, local governments and industry  Annual report of award project

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

15. 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 budget to GEF SGP to develop and implement a portfolio of community-based projects 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

**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 Giang - Cau Hai lagoon

16. 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.

**Table 8. Outputs, key actions/targets and deliverables for Outcome 3.2**

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

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

17. In order to ensure sustainability and implementation of the updated SAP and NAPs, financial 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 organisations 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.

**Table 9. Outputs, key actions/targets and deliverables for Outcome 3.3**

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	<ul style="list-style-type: none"> <li>Partnerships established with regional organizations (PEMSEA and COBSEA) and private sector</li> <li>Number of public-private partnerships identified and documented</li> </ul>	<ul style="list-style-type: none"> <li>Review of report on public-private partnerships published</li> </ul>
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
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	To support implementation of the revised NAPs, funding required and investment opportunities elaborated	6 endorsed National Investment Plans published and

Outputs	Targets/Key actions	Deliverables
habitat management in the SCS [Yr 5]		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

18. 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.

**Table 10. Outputs, key actions/targets and deliverables for Outcome 3.4**

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-databases, 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

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

19. Activities in support of the achievement of Outcome 3.5 involve the review and assessment of 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 sub-component 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.

**Table 11. Outputs, key actions/targets and deliverables for Outcome 3.5**

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 <sup>nd</sup> 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 Committee	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



## Annex A. Priority Actions and Next Steps in Implementing Components 2 and 3

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
<b>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</b>		
<b>Outcome 2.1 Enhanced information-base for coastal habitat management, monitoring and action planning</b>		
<b>2.1.1. Validation of existing or improved algorithms with on-site data</b>		
<ul style="list-style-type: none"> <li>Support site activities and ensure latest remote sensing algorithms and tools to provide data on coastal site</li> <li>Create partnerships with initiatives and projects leading innovation on remote sensing (i.e. with GRID, WCMC, latest research)</li> <li>Training and support to national teams</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Training/Workshop</li> </ul>	Consultant on remote sensing WGs, RSTC Q1-Q2/2023
<b>2.1.2 Mechanism for collection and exchange of regional coastal habitat and pollution information and data established</b>		
<ul style="list-style-type: none"> <li>Regional coordination to ensure all Component 1 site activities collection of data are integrated into a regional meta-database</li> <li>GIS and meta-database of SCS coastal habitat information</li> <li>Partnerships with national regional organizations to coordinate information and data (i.e. COBSEA, PEMSEA)</li> <li>Partnership with IW:LEARN Data and Information (DIM) working group and synergies with other LMEs, as well as links to SDG reporting</li> </ul>	<ul style="list-style-type: none"> <li>Agreed site characterisation forms for the compilation of regionally comparable coastal habitat information and data</li> <li>GIS and meta-database online and routinely updated by SAP implementation partners</li> </ul>	RWGs Consultant on database and GIS Q1-Q3/2023
<b>2.1.3 Role of coastal habitats of the South China Sea in climate change adaptation and the sequestration and storage of carbon</b>		
<ul style="list-style-type: none"> <li>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)</li> <li>Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats</li> <li>Methodology to integrate climate change aspects into TDA and SAP</li> </ul>	<ul style="list-style-type: none"> <li>Published report on the capture and storage of carbon by coastal habitats, including national and regional strategic planning recommendations, shared online</li> <li>Volume of CO<sub>2</sub> captured and stored by SCS habitats defined</li> <li>Extent of uptake of information on carbon sequestration and storage used in mgmt. planning</li> </ul>	Consultant on TDA RWGs & RSTC Q1-Q3/2023
<b>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</b>		
<ul style="list-style-type: none"> <li>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)</li> <li>Review of the potential impacts of sea level rise, climate change, ocean acidification and episodic events on coastal habitats</li> <li>Methodology to integrate climate change aspects into TDA and SAP</li> </ul>	<ul style="list-style-type: none"> <li>Review report published and shared regionally</li> <li>Communications on review outcomes published by media outlets and syndicated via LME LEARN</li> </ul>	Consultant on TDA RWGs & RSTC Q1-Q3/2023
<b>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</b>		

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
<ul style="list-style-type: none"> <li>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)</li> <li>Also review harmonization of joint reporting to other commitments (SDGS, CBD etc.)</li> <li>Countries (6) contribute to compiled meta-database on existing data</li> <li>No of recommendations and innovative approaches to support monitoring and assessments</li> </ul>	<ul style="list-style-type: none"> <li>Review assessment report with contribution from all countries</li> <li>Proposal and recommendations on sustainable solution to support monitoring and assessments (to be integrated in SAP)</li> </ul>	National Focal Point on habitats & LbP RWGs Q1-Q3/2023
<b>Outcome 2.2 Effective integration of regional science in the management of land-based pollution</b>		
<b>2.2.1 Updating the nutrient carrying capacity model for the SCS marine basin and integration into SCS GIS</b>		
<ul style="list-style-type: none"> <li>Building upon SCS project nutrient carrying capacity assessment and UNEP Global Nutrient Project (pilot project in Manila Bay and Laguna de Bay), replicate exercise in key areas/hotspots</li> </ul>	<ul style="list-style-type: none"> <li>Nutrient carrying capacity developed and implemented</li> <li>Communications products available for regional and global sharing</li> <li>1 * IW Experience Note</li> </ul>	Consultant on modelling RWG-LbP Q1-Q3/2023
<b>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</b>		
<p>Complementing the work of the National Report and NAP update (see output 2.6.5) on land-based pollution;</p> <ul style="list-style-type: none"> <li>Overview of existing data and models on key contaminants, building on existing initiatives. Fully integrate all new national and regional research</li> <li>Review commitments to Global and regional obligations with regards to pollution and provide recommendations</li> <li>Regional Report as contribution to TDA and SAP revision</li> </ul>	<ul style="list-style-type: none"> <li>Published report shared nationally and regionally</li> <li>Pollution hotspot site characterization templates developed</li> <li>Hotspot information accessible online</li> <li>Science-Policy Interface and development of policy briefs and recommendations</li> <li>1 * IW Experience Note</li> </ul>	National Focal Pont on LbP RWG-LbP Q1-Q4/2023
<b>2.2.3. Quantification of effluent volumes and contaminant loadings from coastal aquaculture to the SCS marine basin</b>		
<ul style="list-style-type: none"> <li>Effluent from aquaculture and mariculture operations identified as key threat to dominant coastal biomes</li> <li>Quantification of effluent volumes and contaminant loadings from coastal aquaculture</li> </ul>	<ul style="list-style-type: none"> <li>Number of aquaculture sites for which effluent and contaminant loadings estimated</li> <li>Published methodology and procedures for estimating aquaculture pollution loadings and impacts</li> <li>1 * IW Experience Note</li> </ul>	National Focal Pont on LbP RWG-LbP Q1-Q4/2023
<b>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</b>		
<b>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</b>		
Building upon lesson learned in community-based wastewater mgmt. in Batam, Indonesia and work of PEMSEA and COBSEA	<ul style="list-style-type: none"> <li>Catalogue of best practice technologies and management approaches for land-based pollution published and accessible online</li> </ul>	RWG-LbP Q1-Q3/2023

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
<ul style="list-style-type: none"> <li>Agree on mechanism to fully share National best practices and contribute to regional and global platforms</li> <li>Review best practices also related to work on Blue/Green and circular economy initiatives and Sustainable Consumption and Production</li> <li>Number of best practice technologies and measures tested, documented and shared. Including how these will contribute to the SDGs</li> </ul>		
<b>2.3.2 Review of legislative and institutional frameworks for land-based pollution and habitat management in participating countries</b>		
<ul style="list-style-type: none"> <li>National level review as part of the NAPs, under coordination of the IMC</li> <li>Regional Review of legislative and institutional frameworks for land-based pollution and habitat management</li> <li>Identification of gaps and needed reforms</li> </ul>	<ul style="list-style-type: none"> <li>Review published and shared regionally</li> <li>Gaps identified and institutional, policy reforms identified (see output 2.3.3)</li> </ul>	National Focal Point on Legal Matters RTF-L Q1-Q2/2023
<b>2.3.3. Harmonized national Standard Operating Procedures for land-based pollution control and management [including agreed sediment, biota, &amp; water quality criteria]</b>		
<ul style="list-style-type: none"> <li>Update on gaps and needs for SOPs in line with regional and global agreements</li> <li>No of SOPs developed and adopted</li> </ul>	<ul style="list-style-type: none"> <li>Regional guidelines on Standard Operating Procedures published</li> <li>Adopted National Standard Operating Procedures available online</li> </ul>	RWG-LbP National Focal Point on LbP Q1-Q4/2023
<b>2.3.4. Revised national/provincial policies and supporting regulations for land-based pollution and habitats developed, enacted and implemented</b>		
<ul style="list-style-type: none"> <li>Support to countries to update/develop new national/provincial policies and supporting regulations for land-based pollution and habitats</li> <li>Reflect gaps, reforms and other recommendations into revised NAPs and SAP</li> </ul>	<ul style="list-style-type: none"> <li>6 national reports on policy and legal aspects of land-based pollution management</li> <li>Endorsed policy and executive orders, provincial/local ordinances and by-laws</li> </ul>	National Focal Point on Legal Matters RTF-L Q1-Q3/2023
<b>Outcome 2.4 Updated Total Economic Values of coastal habitats for use in development planning and decision-making and blue economy</b>		
<b>2.4.1 Expanded datasets and estimates of economic valuation information on the goods and services of SCS coastal habitats</b>		
<ul style="list-style-type: none"> <li>Review/revise economic evaluation methodology in consideration of new approaches</li> <li>Implement and update Economic Values of coastal habitats data for inclusion in revised SAP</li> </ul>	<ul style="list-style-type: none"> <li>Published methodology</li> <li>National/Regional report with economic evaluation integrated into SAP</li> </ul>	RTF-EV National Focal Point on EV Q1-Q3/2023
<b>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</b>		
<ul style="list-style-type: none"> <li>Partnerships established with key regional organizations (PEMSEA, COBSEA, ASEAN) on current status, gaps and needs for enhancing blue and circular economy in the region</li> <li>Compilation of good examples from within and beyond the region where relevant</li> <li>Recommendations on actions to further support SAP implementation</li> </ul>	<ul style="list-style-type: none"> <li>Report on good examples, and recommendations to strengthen a blue economy (and circular economy) approach and innovative financing for pollution and habitat management</li> <li>SAP revision incorporated blue and circular economy</li> </ul>	RTF-EV National Focal Point on EV Q1-Q3/2023
<b>Outcome 2.5 Regionally appropriate tools and mechanisms to guide the development of sustainable management systems for coastal habitats and land-based pollution</b>		
<b>2.5.1. Online catalogue of best practice management measures and technologies for sustainable use of SCS coastal habitats and land-based pollution management</b>		

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
<ul style="list-style-type: none"> <li>• Compilation of regional best-practices (from SCS project and other initiatives)</li> <li>• Best practices on innovative management approaches and nature based solutions</li> <li>• Coordination with national NTWG and Committees to document best practices for site activities</li> <li>• Updated best-practices online</li> </ul>	<ul style="list-style-type: none"> <li>• Catalogue of best practices accessible online</li> <li>• Communications products on best practices produced and syndicated online</li> </ul>	RSTC NTWG Q1-Q2/2023
<b>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</b>		
<ul style="list-style-type: none"> <li>• 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;</li> <li>• Implement training, study tour and exchange initiatives in all countries</li> </ul>	<ul style="list-style-type: none"> <li>• Reports of study tour and exchange initiatives</li> <li>• Annual reports of best practice examples of community level inputs to SAP implementation initiatives</li> </ul>	NTWG National Focal Points on habitats and LbP Site Managers Q2-Q4/2023
<b>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</b>		
<b>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</b>		
<p>TDA for SCS published in 2000.</p> <ul style="list-style-type: none"> <li>• 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)</li> <li>• TDA drafted for review by RSTC and regional working groups, as well as peer review process</li> <li>• TDA adopted at Steering Committee and presentation to COBSEA's IGM</li> </ul>	Updated and regionally endorsed Transboundary Diagnostic Analysis for the SCS marine basin published and disseminated at national and regional levels	Consultant on TDA RSTC IMC PSC 1-Q3/2023
<b>2.6.2. SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD)</b>		
<ul style="list-style-type: none"> <li>• Methodology/Guidelines for update of national habitat reports</li> <li>• Partnership with key regional institutions and projects to combine resources and information</li> <li>• Update of national habitat reports</li> <li>• Regional synthesize/ SCS State of Coastal Habitats report in line with global commitments (SDGs, CBD)</li> </ul>	Published state of coastal habitat reports	Consultant on TDA RSTC RWGs Q3-Q4/2023
<b>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</b>		
<ul style="list-style-type: none"> <li>• 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</li> <li>• Incorporation of additional elements (depending on information availability) including blue and circular economy and nature-based solutions</li> <li>• SAP drafted for review by RSTC and regional working groups, as well as peer review process</li> </ul>	<ul style="list-style-type: none"> <li>• Adoption by appropriate Ministers of an updated Strategic Action Programme for the South China Sea</li> <li>• Endorsed Strategic Action Programme published</li> </ul>	Consultant on TDA RSTC / PSC Q4/2023 – Q1/2024

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
<ul style="list-style-type: none"> <li>SAP adopted at Steering Committee and presentation to COBSEA's IGM</li> <li>SAP monitoring framework</li> <li>Contribution assessed of SAP implementation to the SDGs and CBD Post 2020 Framework</li> </ul>		
<b>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</b>		
<ul style="list-style-type: none"> <li>Recommendations and project concepts for SAP implementation including regional level implementation, incorporation into national planning (financial mechanisms addressed in outcome 3.3)</li> </ul>	<ul style="list-style-type: none"> <li>Recommendations, actions and project concepts for SAP implementation</li> </ul>	RWGs RSTC Q4/2023
<b>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</b>		
<p>Linked with 2.6.2</p> <ul style="list-style-type: none"> <li>Methodology developed for NAP update including preliminary information on climate change, marine litter and other emerging issues</li> <li>Incorporation of additional elements (depending on information availability) including blue and circular economy and nature-based solutions</li> </ul>	Adopted National Action Plans and sustainable financing strategies accessible online	National Focal Points on habitats and LbP NTWG and IMC Q3-Q4/2023
<b>COMPONENT 3. FACILITATING REGIONAL AND NATIONAL LEVEL INTEGRATION AND COOPERATION FOR IMPLEMENTATION OF THE SOUTH CHINA SEA STRATEGIC ACTION PROGRAMME</b>		
<b>Outcome 3.1 Regional and sub-regional co-operation in the integration of scientific knowledge and research outputs with management and policy making</b>		
<b>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]</b>		
<ul style="list-style-type: none"> <li>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</li> <li>Annual Meetings of the RSTC and additional ad-hoc online meeting as requested</li> <li>Oversight of the scientific and technical elements of the project, providing sound scientific and technical advice</li> </ul>	<ul style="list-style-type: none"> <li>RSTC Terms of Reference</li> <li>Annual meeting reports (documenting scientific and technical advice and participant lists)</li> </ul>	RSTC Q3/2022 – Q2/2024
<b>3.1.2 Knowledge exchanges between government and scientific community through biennial Regional Scientific Conferences</b>		
<ul style="list-style-type: none"> <li>Biennial Regional Scientific Conferences</li> </ul>	<ul style="list-style-type: none"> <li>Published reports of the Regional Scientific Conferences</li> <li>Report on the uptake and use of regionally accumulated science</li> </ul>	RSTC Q3/2023
<b>3.1.3 Best practice exchanges between local government officials and coastal managers on science-based management via annual Mayor's Round-Table meetings</b>		
<ul style="list-style-type: none"> <li>Number of Mayor's Round-Table meetings convened</li> <li>Number, scope &amp; reach of communications to raise local official awareness of best practices</li> </ul>	Reports of Mayor's Round-Table Meetings, including documented evidence of behaviour change as a result of exposure to best practice guidance	National Focal Points on habitats Site Managers Q3/2023

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
<b>3.1.4 Memoranda of Agreement for joint management of 2 priority transboundary water areas agreed &amp; implemented</b>		
<ul style="list-style-type: none"> <li>Bilateral cooperation for transboundary resource management between (a) Cambodia and Vietnam and (b) Cambodia and Thailand</li> <li>Status of signature of Memoranda of Agreement</li> </ul>	Signed Memoranda of Agreement outlining agreed joint actions for transboundary coastal resource management	IMC, National Focal Points of related habitats, local Government and Site Managers at the transboundary sites of Cambodia, Thailand & Vietnam Q1-Q3/2023
<b>3.1.5 Cooperation with the GEF fisheries refugia project and other relevant regional initiatives</b>		
<ul style="list-style-type: none"> <li>Promote joint actions at the national level between SCS SAP and FR</li> <li>Ensure FR Focal Points participate in National meetings</li> <li>Coordinate inputs from the FR into the revised TDA and SAP</li> </ul>	<ul style="list-style-type: none"> <li>Reports of joint planning meeting</li> <li>Published revised NAPs and SAP containing section on lessons from fisheries refugia project</li> </ul>	National Focal Points on habitats and National Focal point on Fisheries <i>Refugia</i> RSTC Q1-Q3/2023
<b>3.1.6 Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry [annual]</b>		
<ul style="list-style-type: none"> <li>Design and implement Operational award program on best practices in coastal habitat and land-based pollution management for communities, local governments and industry</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Documented examples of innovation and best practice by communities, local governments and industry</li> <li>Annual report of award project</li> </ul>	RSTC Q3/2023 – Q2/2024
<b>Outcome 3.2 Capacity for civil society and community organization participation in SAP implementation strengthened via operational partnership with GEF SGP</b>		
<b>3.2.1 Cooperation with GEF SGP in the commissioning and implementation of an additional 12 community-based projects for SAP implementation</b>		
Number of GEF Small Grants Programme projects commissioned and implemented in support of SAP implementation	Annual reports of SGP-SAP implementation partnership	GEF SGP coordinator Q1/2023 – Q1/2024
<b>3.2.2 CSO &amp; CO inputs elicited for planning and M&amp;E of the SCS-SGP partnership via annual NGO forums</b>		
NGO forums convened to engage SGP projects	Reports of NGO forum meetings	GEF SGP coordinator Q4/2023
<b>3.2.3 Training program on science and management of SCS coastal habitats and resources for SGP proponents</b>		
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	GEF SGP coordinator Q4/2023
<b>Outcome 3.3 Relationships between central and local governments and the private sector strengthened and formalized</b>		
<b>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</b>		
<ul style="list-style-type: none"> <li>Partnerships established with regional organizations (PEMSEA and COBSEA) and private sector</li> <li>Number of public-private partnerships identified and documented</li> </ul>	Review of report on public-private partnerships published	RSTC RWGs Q1-Q2/2023
<b>3.3.2 Identification of opportunities for private sector investment (e.g. oil and gas, fisheries, tourism) in implementation of the updated SAP</b>		
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	IMC Private sector Q4/2023
<b>3.3.3 Two partnership forums to facilitate cooperation with private sector on implementation of the updated SAP</b>		



Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
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	RSTC Q4/2023
<b>3.3.4. Updated and adopted National Investment Plans for land-based pollution and habitat management in the SCS [Yr 5]</b>		
To support implementation of the revised NAPs, funding required and investment opportunities elaborated	6 endorsed National Investment Plans published and disseminated nationally and regionally	IMCs Q4/2023
<b>3.3.5. Regional financial mechanism for land-based pollution and habitat management [Yr 5]</b>		
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	PSC Q4/2023
<b>Outcome 3.4 Revitalization of regional mechanisms for communications, knowledge exchange, and information and data management and sharing</b>		
<b>3.4.1 A variety of multi-media information and knowledge products based on SCS SAP implementation communications strategy</b>		
Number of multi-media and knowledge products produced	Multi-media information and knowledge products published and accessible online	RWGs on habitats and LbP Q2/2023
<b>3.4.2 Regionally appropriate knowledge tools developed to support decision-making and planning</b>		
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	Consultant? RSTC Q2/2023
<b>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</b>		
Number of users, volume of content accessed, and online visibility of the SCS website and associated databases	Regional and national portals, GIS and meta-databases, repository of best practices, lessons learned and results accessible online	PCU Q4/2022 – Q2/2024
<b>3.4.4 Active engagement with GEF IW:LEARN [1% of project resources] including participation in IW conferences and 3 experience notes</b>		
Number of IW:LEARN experience notes published	Published experience notes	PCU Q2/2023
<b>Outcome 3.5 Agreed arrangements for strengthened regional cooperation in the management of the marine and coastal environment of the South China Sea</b>		
<b>3.5.1 Biannual meetings of the Regional Task Force on Legal Matters</b>		
Regional Task Force meetings to develop workplan towards the development of a proposed regional instrument to be discussed at the 2 <sup>nd</sup> Steering Committee, and then to ensure coordination on its development	Reports of the meetings of the Regional Task Force on Legal Matters	RTF-L Q4/2022 – Q2/2024
<b>3.5.2 National Task Force on established and functional</b>		
National Task Force on Legal Matters (NTF-L) established and regular meetings conducted	Reports of the meetings of National Working Groups	National Task Force on Legal Matters Q4/2022 – Q2/2024
<b>3.5.3 Process for development of a proposed arrangement for regional cooperation defined and planned</b>		
Proposal developed and discussed at the Steering Committee	Report outlining agreed process	PSC Q4/2023
<b>3.5.4 National stakeholder inputs to drafting of instrument for strengthened regional cooperation facilitated via national consultations</b>		

Outcomes/Outputs and Targets/Key Actions	Deliverables	Execution arrangements - consultancy, partnerships, sub-contract, etc, Responsibilities and Timeframe
Through the NTWG and NTF-L stakeholder input to drafting phase of instrument for cooperation	Reports of national stakeholder consultation process	NTWG NWG-L Q4/2023
<b>3.5.5 Adopted instrument for strengthened regional cooperation</b>		
Status of adoption of the instrument	Adopted instrument	PSC Q2/2024