

First Meeting of the Regional Scientific and Technical Committee

Bangkok, Thailand, 17-19 October 2022

ACHIEVEMENTS IN IMPLEMENTING THE STRATEGIC ACTION PROGRAMME IN THAILAND DURING 2008-2021









Achievements in Implementing the Strategic Action Programme in Thailand during 2008-2021

INTRODUCTION

Recognizing 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) in preparing 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). The up-dated Strategic Action Programme was one of the anticipated outputs from the UNEP/GEF Project entitled "Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand" (SCS Project), and the document contains the final text as approved by all countries during the 8th meeting of the Project Steering Committee in Hanoi, Viet Nam, August 2008. It was anticipated that the countries would commence implementation of the envisaged actions in 2008/2009 in parallel with the process in seeking further support from GEF for the SAP implementation.

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. In order to implement the SAP, at the regional level, the GEF adopted on November 03, 2016 the project entitled "Implementing the Strategic Action Programme for the South China Sea and Gulf of Thailand (SCS SAP Project)". It was noted that regional actions would contribute to achieving the target through: capacity building for activities at the national and local levels; provision of opportunities in exchange of experiences and good practices among countries in the region; common guidelines and other tools used by countries in management planning and practices; standardisation in regional synthesis and comparison; provision of sound scientific information for management; and encouraging governments at all levels to develop policy related to environment management. It was also emphasised that actions at the national and local levels are critical for success of the SAP targets. National Action Plans (NAPs) were developed in all participating countries and had been, or would be adopted by, governments to meet national priorities and to contribute to regional targets incorporated in the SAP.

As other participating countries, Thailand developed the NAPs for habitat and land-based pollution management during the course of the SCS Project and have conducted a series of activities in implementing the SAP and NAPs since 2008. This evaluation provides evidences on proactive contribution of Thailand in implementing the SAP and NAPs on mangroves, coral reefs, seagrass and coastal wetlands and supports to estimate country co-finance for environment management in the SCS during last decade. The reviews of past activities and outputs would be helpful for seeking the gaps which shall be addressed in implementing the SCS-SAP project in 2022-2023.

EVALUATION OF ACHIEVEMENTS

1/ Mangroves

SAP Targets and Summary of Achievements

The Strategic Action Programme targets for mangroves in Thailand focused on the improvement of the management of mangrove areas utilized for the sustainable use of mangrove resources. This will be achieved via the development and implementation of sustainable use management plans for 10,000 ha of mangroves, as well as the reform of laws and regulations for the sustainable use of mangrove areas in Thailand. This aims to increase the total area of mangrove being managed effectively on a sustainable use basis from 13,100 ha to 23,100 ha. The Strategic Action Programme targets also focus on increasing the area of mangrove designated as a National Park or assigned Protected Area status from 11,500 to 12,900 ha including the designation and plans for the management of 1,600 ha of mangrove as non-conversion, sustainable use areas. It will also result in the replanting of 8,000 ha of deforested mangrove land and the

enrichment planting of a further 3,200 ha of mangrove to increase biodiversity. Priority areas for management in Thailand include Pak Phanang Bay, Trad Province, Kung Kraben Bay, Welu River Estuary and Thung Kha Bay – Savi Bay. There existed many activities using national resources for implementing the SAP in last years since 2008 with numerous outputs which are summarized in table 1 below.

Table 1. Summary of the SAP targets for mangroves and achievements during 2008-2021 in Thailand

Regional output	SAP	SAP target sites and achievements (ha) during 2008-202					021
	2008 targets (ha)	Trad Province	Thung Kha – Savi Bay	Pak Phanang Bay	Kung Kraben Bay	Welu River Estuary	Total
1.1.1 Declaration of 57,400 ha of mangrove as National Parks and Protected Areas	1,400	6,081	2,780	3,915	588	-	8,861
1.1.2 Designation and plans for the management of 166,600 ha of mangrove as nonconversion, sustainable use areas	1,600	-	-	-	-	-	-
1.1.3 Reform of laws and regulations for the sustainable use of 602,800 ha of mangrove forest*	10,000	10,852	4,338	3,915	588	16,334	36,027
1.1.4 Replanting of 21,000 ha of deforested mangrove land	8,000	313	269	1,223	5,204		7,009
1.1.5 Biodiversity increased for 11,200 ha of mangrove forest via enrichment planting	3,200	-	-	-	-	-	-
1.1.6 Monitoring of management effectiveness	1,600	-	-	-	-	-	-

^{*} Due to the enforcement of the Promotion of Marine and Coastal Resources Act 2015, all mangrove areas involve in the reform of laws. The figures mean the total area of those sites

Descriptions

1.1.1 Declaration of 57,400 ha of mangrove as National Parks and Protected Areas

Trad Province

1/ Area: 3.43 ha; Designated as Mu Koh Chang National Park

Year of Declaration: 1982

Adoption Entity: Government Gazette by King Rama 9, Prime Minister countersigned

2/ Area 2: 6,077.5 ha, Designated as National Reserved Forest

Year of Declaration: Adoption Entity:

Thung Kha – Savi Bay

Area: 2,780 ha; Designated as: Mu Koh Chumphon National Park

Year of Declaration: 1999

Adoption Entity: Government Gazette by King Rama 9, Prime Minister countersigned

Pak Panang Bay

Area: 3,915 ha; Designated as: National Reserved Forest

Year of Declaration: TBD Adoption Entity: TBD

Kung Kraben Bay

Area: 558 ha, Designated as: TBD

Year of Declaration: TBD Adoption Entity: TBD

1.1.2 Designation and plans for the management of 166,600 ha of mangrove as non-conversion, sustainable use areas

N/A

- 1.1.3 Reform of laws and regulations for the sustainable use of 602,800 ha of mangrove forest
- (a) 20-year Strategy of Ministry on Natural Resources and Environment (2017-2036),
- (b) Action Plan of Department of Marine and Coastal Resources (2017-2036), and
- (c) The Act on the Promotion of Marine and Coastal Resources Management B.E. 2558 (2015).
- 1.1.4 Replanting of 21,000 ha of deforested mangrove land

Trad: 313 ha

Thung Kha – Savi Bay: 269 ha Pak Phanang Bay: 1,233 ha

Kung Kraben Bay & Welu River Estuary: 5,204 ha

1.1.5 Biodiversity increased for 11,200 ha of mangrove forest via enrichment planting

N/A

1.1.6 Monitoring of management effectiveness

One ecological/Environmental Indicators used was forest cover via survey.

2/ Coral reefs

SAP Targets and Summary of Achievements

Status in 2008 indicated that 9 sites among 14 priority sites in Thailand were under management with 4 under medium and 5 under low management effectiveness. The targeted coral reef area to be added for management through SAP implementation is 18,000 ha, bringing the total area across the nine sites under management to 72,000 ha. The implementation of the Strategic Action Programme also aims to increase the management effectiveness across all 14 sites from low and/or medium to high.

X

27,490

•		•			•		
	Managed in 2008	SAP target area (ha)*	Total area (ha) ** managed until 2021	Capacity (high, medium, low)	Management approach (ha)	Management Tools (ha)	Monitoring (ha)
Mu Koh Chumporn	7,360		7,360	High	7,360	7,360	X
Mu Koh Chang	11,780		11,780	High	11,780	11,780	X
Mu Koh Ang Thong	5,110		5,110	High	5,110	5,110	X
Mu Koh Samui	22,770		22,770		22,770		X
Mu Koh Samet	3,240		3,240	High	3,240	3,240	X
Sichang Group	0		38.2		38.2		X
Sattaheep Group	1,320		288				X
Lan and Phai Group	1,200		133.6		133.6		X
Chao Lao	0						X
Prachuab	270						X
Koh Tao Group	0		350.4		350		X
Song Khla	0						X
Koh Kra	0		1,340.6		1,346.6		X

Table 2. Summary of the SAP targets for coral reefs and achievements during 2008-2021 in Thailand

12.8

52,008

12.8

52,423

Descriptions

Losin

Total

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

72,000

27,490 hectares of coral reefs at 4 sites proclaimed as National Park have sustainably managed through governance structure of the Department of National Park, Wildlife and Plant Conservation

• Mu Koh Chumphon (7,360 hectares)

950

54,000

- Mu Koh Chang (11,780 hectares)
- Mu Koh Ang Thong (5,110 hectares)
- Mu Koh Samet (3,240 hectares)
- 1.2.1 Management capacity (number/levels human resources, facilities and equipment, and sustainable financing mechanisms) built for 46 coral reef sites
- 4 sites with proper management capacity built in terms of human resources, facilities and equipment, sustainable financing mechanism (fiscal budget, service fee/remuneration) and Protected Area Committee (PAC)
 - Mu Koh Chumphon (66 officers)

^{*} No target in ha indicated for each site, total targets = managed in 2008 (54,000 ha) + added for management (18,000 ha)

^{**} Area (ha) under sustainable management with sufficient capacity, approach reformed, tools applied and stress reduced

- Mu Koh Change (99 officers)
- Mu Koh Ang Thong (90 officers)
- Mu Koh Samet (100 officers)
- 1.2.2 Management approaches and policy, legal & institutional reforms (integrated, community-based, multiple use) improved at 46 coral reef sites

10 sites (Mu Koh Chumphon, Mu Koh Chang, Mu Koh Ang Thong, Mu Koh Samet, Lan and Phai Group, Si Chang Group, Koh Kra, Koh Losin, Koh Tao Group, and Koh Samui) with significant establishment of policies and legal reform

- 1. Act on the Promotion of Marine and Coastal Resources Management A.D 2015
- 2. National Parks Act A.D. 2019
- 3. Promotion of stakeholder engagement in sustainable use and conservation practices/activities
- 4. Application of management approach to address threat and user conflicts e.g. Marine Spatial Planning
- 1.2.3 Management tools (licensing and permit systems, seasonal closures, zoning) developed and utilized to address key threats at priority sites
- 4 sites with establishment of key management tools such as Licensing and Entry permits, Seasonal closers, zoning scheme, and Surveillance and law enforcement (Mu Koh Chumphon, Mu Koh Chang, Mu Koh Ang Thong, and Mu Koh Samet)
- 1.2.4 Established mechanism for monitoring coral reef management

All 14 sites were included in quadrennial status assessment and monitoring program. The National Policy and Plan Committee on Marine and Coastal Resources Management has approved an annual status assessment and monitoring from 2021 onward.

3/ Seagrass

SAP Targets and Summary of Achievements

In Thailand, the Strategic Action Programme identifies four known seagrass sites (2,553 ha) with 1,780 ha (70 percent) under some form of management in 2008. The four sites are Thungka Bay, Kung Krabane Bay, Surat Thani and Pattani Bay but no seagrass area targeted for management through SAP implementation. However, there existed many activities to implementing the SAP and Seagrass NAP supported by central and local governments during last decade. The table 2 below summarizes achievements during 2008-2021 under every regional outputs of the SAP for seagrass in Thailand.

Table 3. Regional SAP target for seagrass and achievements (ha) during 2008-2021 in Thailand

Regional Output	Thungka Bay	Samui Island	Pha-ngan Island	Total
1.3.1 Twenty seagrass areas totaling 26,036 ha under sustainable management with supporting laws and regulations	1,337	803	394	2,534
1.3.2 Amended management plans for 7 existing MPAs with significant seagrass areas, to include specific seagrass-related management actions and policy, legal and institutional reforms	1,337			1,337

1.3.3 Designation of 7 new Marine Protected Areas focusing on seagrass areas identified in the prioritized listings of the SCS Project	-	803	394	1,197
1.3.4 Established mechanism for monitoring seagrass habitat management	1,337	803	394	2,534

Descriptions

- 1.3.1 Twenty seagrass areas totaling 26,036 ha under sustainable management with supporting laws and regulations
 - Thungka Bay 1,337 hectares
 - Samui Island 803 hectares
 - Pha-ngan Island 394 hectares
- 1.3.2 Amended management plans for 7 existing MPAs with significant seagrass areas, to include specific seagrass-related management actions and policy, legal and institutional reforms

Thungka Bay was claimed within the Mo Koh Chumphon National Park (MPA) under the authority of the Department of National Park, Wildlife and Plant Conservation. The DNP has established conservation measures to retain primitive condition of this seagrass bed.

1.3.3 Designation of 7 new Marine Protected Areas focusing on seagrass areas identified in the prioritized listings of the SCS Project

Two sites of seagrass beds at Samui and Pha-ngan Islands were designated within the Environmental Protection Area (under provision of the Enhancement and Conservation of National Environmental Quality Act (no. 2) B.E. 2561 (2018) of Surat Thani Province. Protection measures for seagrass beds in the area were prescribed.

1.3.4 Established mechanism for monitoring seagrass habitat management

Activities conducted include seagrass habitats mapping including status assessment and monitoring of all sites done every 4 years, conduct research on rehabilitation through transplantation technique and carbon sequestration, conduct routine surveillance and law enforcement on illegal fishing practices (push nets and trawling) at all sites through the Office of Marine and Coastal Resources Administration.

4/ Wetlands

SAP Targets and Summary of Achievements

The Strategic Action Programme implementation for Thailand coastal wetlands would result in the adoption and implementation of management plan for: 1 peat swamp at Thale Noi Wildlife Non-hunting Area (45,700 ha); and 1 non-peat swamp at Khao Sam Roi Yot National Park (9,808 ha). This includes the declaration of wetland areas with protection status and needed management reforms, and adoption of a regional monitoring scheme for national implementation. Table 4 below highlights achievement in implementing the SAP on wetlands during 2008-2021.

Table 4. Summary of the SAP targets for coastal wetlands and achievements (ha) during 2008-2021 in Thailand

Regional outputs	Thale Noi non hunting area	Khao Sam Roi Yot National Park	Koh Ra- Prathong	Koh Kra	Don Hoi Lot
1.4.1 Integrated management plans developed and under implementation for at least 2 lagoons (21,818 ha), 10 estuaries (639,418 ha), 5 tidal flats (96,903 ha), 1 peat swamp (45,700 ha) and 1 non-peat swamp (9,808 ha)	45,700	9,808	64,200	374	41,600
1.4.2 Declaration of wetland areas with protection status (i.e. non-hunting area, nature reserves, protected areas, Ramsar Sites)	45,700	9,808	19,648 (Ramsar site)	374 (Ramsar site)	41,600 (Ramsar Sites)
1.4.3 Adoption of a regional monitoring scheme and its national implementation	-	-	-	-	-

Descriptions

1.4.1 Integrated management plans developed and under implementation for at least 2 lagoons (21,818 ha), 10 estuaries (639,418 ha), 5 tidal flats (96,903 ha), 1 peat swamp (45,700 ha) and 1 non-peat swamp (9,808 ha)

- Thale Noi Non-hunting Area 45,700 hectares
- Khao Sam Roi Yot National Park 9,808 hectares
- Koh Ra-Prathong 64,200 hectares
- Koh Kra -374 hectares
- Don Hoi Lot 41,600 hectares

Thale Noi Non-hunting Area & Khao Sam Roi Yot National Park protected and managed by the Department of National Park Wildlife and Plant Conservation. Regular survey is operated by the staff of non-hunting area for precaution and protect areas from illegal activities such hunting, deforestation. Public awareness has been practiced.

Wetlands in Thale Noi Wildlife Non-Hunting Area was responsible by Thale Noi Wildlife Non-Hunting Area, Department of National Park Wildlife and Plant Conservation (DNP) with 97 staff. The management and enforcement were adequate. There new management plan and regulation established at the site by Marine Protected Area Management Effectiveness Assessment Tool (MPA) in 2017 by Office of Natural Resources and Environmental Policy and Planning (ONEP) and WILD ANIMAL CONSERVATION AND PROTECTION ACT, B.E. 2562 (2019) with the Secondary Legislation. At least 3 participations of communities are 1) network of forest protection volunteer. 2) DNP volunteer. and 3) Advisory Committee for Thalay Noi Non-Hunting Area (PAC).

Khao Sam Roi Yot National Park was responsible by Khao Sam Roi Yot National Park, Department of National Park Wildlife and Plant Conservation (DNP) with 98 staff. The management and enforcement were adequate. There new management plan and regulation established at the site by Marine Protected Area Management Effectiveness Assessment Tool (MPA) in 2017 by ONEP and NATIONAL PARKS ACT, B.E. 2562 (2019). There are mutual agreements between Khao Sam Roi Yot National Park and the tourist

boat operators such as the group of Thung Sam Roi Yot, Khao Daeng Canal Group, Bang Pu Beach Group, etc., are the community surrounding the National Park.

Ko Ra-Prathong has been established under Ramsar site Management Effectiveness Tracking Tool (R-METT) and MPA to be RAMSAR site. Enforcements are under various laws such as Forestry Act B.E. 2484 (1941), National Reserved Forest Act B.E. 2507 (1964) and Act Promulgating the land code B.E. 2497 (1954)

Ko Kra has been established under R-METT and MPA to be RAMSAR site. Department of Marine and Coastal Resources is processing on law and regulation to support the Cabinet Resolution Marine Resources Protected Area Announcement.

Don Hoi Lot: Set up the conservation group in the pilot area and monitor the conservation and change of mangrove ecosystem; Establish management mechanism (including M&E) and strengthening on-site management, coordination, and communication.

1.4.2 Declaration of wetland areas with protection status (i.e., non-hunting area, nature reserves, protected areas, Ramsar Sites)

Thale Noi Non-hunting Area

Area: 45,700 hectares; Assigned Protection Status: non-hunting area

Year of Declaration: TBD

Adoption Entity: the Department of National Park and Plant Conservation (DNP) under Wild

Animal Conservation and Protection Act. B.E. 2562 (2019)

Khao Sam Roi Yot National Park

Area: 9,808 hectares; Assigned Protection Status: TBD

Year of Declaration: TBD Adoption Entity: TBD

Koh Ra-Prathong

Area: 19,648 ha; Assigned Protection Status:

Year of Declaration: 12 August 2013

Adoption Entity: TBD

Koh Kra

Area: 374 ha; Assigned Protection Status: TBD

Year of Declaration: 12 August 2013

Adoption Entity: TBD

1.4.3 Monitoring scheme for wetland management

Recently, information on monitoring scheme to evalute periodically wetland status and management effectiveness has not been available.

REFERENCE

Mangrove

https://nps.dnp.go.th/parksdetail.php?id=29

Government Gazette on prescribing mangrove area of Thung Kha bay, Savi Bay, and islands in Saplee Subdistrict of Pa Tew District, Paknum, Tha Yang, Had Sai Ree, Thung Kha, Wisai Nuea Sub-districts of Mueang Chumphon District, Wisai Tai, Dan Savi, Tha Hin Sub-districts of Savi District, Pak Tako, Thung Tako, Bang Num Jead of Lang Suan District, Chumphon Province to be National Park B.E. 2542

Suppawimut, Worawit. 2019. Application of mangrove index for mangrove forest classification using landsat 8 imageries: A case study of Thung Kha.- Sawi Bay, Chumphon province.

Mangroves Conservation Division, Department of Marine and Coastal Resources. 2012. Mangrove area of Trat Province. Page 4. (in Thai)

Mangroves Conservation Division, Department of Marine and Coastal Resources. 2020. Report on Status of Mangrove and Beach Forest in 2020. Page 3. (in Thai)

https://bigdata.dmcr.go.th/detail/province/83/6

Coral Reefs

- Department of National Park, Wildlife and Plant Concervation. (26 Aug 2022). Area of National Park. https://catalog.dnp.go.th/dataset/areaofnp (in Thai)
- Department of marine and coastal resources. (n.d.). Island of Chonburi Province. DMCR Data Center. https://km.dmcr.go.th/c 1/s 186/d 7422 (in Thai)
- Department of marine and coastal resources. (n.d.). Koh Kra. DMCR Data Center https://projects.dmcr.go.th/miniprojects/169/description/48790 (in Thai)
- Department of National Park, Wildlife and Plant Concervation. (19 Sep 2022). National Park House. https://catalog.dnp.go.th/dataset/accommodationinnp (in Thai)
- Department of National Park, Wildlife and Plant Concervation. (21 April 2022). Number of National Park Visitors. https://catalog.dnp.go.th/dataset/stat-tourism (in Thai)
- Department of marine and coastal resources. (n.d.). Island of Chanthaburi Province. DMCR Data Center. https://km.dmcr.go.th/c_1/s_186/d_7410 (in Thai)
- Department of marine and coastal resources. (n.d.). Island of Ranong Province. DMCR Data Center. https://km.dmcr.go.th/c_1/s_186/d_7544 (in Thai)
- Department of marine and coastal resources. (n.d.). Island of Patani Province. DMCR Data Center. https://km.dmcr.go.th/c_1/s_186/d_7539 (in Thai)
- Department of marine and coastal resources. (n.d.). Island of Songkla Province. DMCR Data Center. https://km.dmcr.go.th/c_1/s_186/d_7537 (in Thai)
- Department of marine and coastal resources. (n.d.). Coral Reef. DMCR Data Center. https://km.dmcr.go.th/c_3 (in Thai)
- Department of marine and coastal resources. (2015). Act on the promotion of Marine and Coastal Resources Management, B.E. 2558 (2015) unofficial tranlation. DMCR Publications. https://www.dmcr.go.th/detailLib/3051
- Koh Tao sub-district municipality. (n.d.). Koh Tao History. http://www.kohtao.go.th/history.php (in Thai)
- Yeemin, T. and Somkleeb, N. (n.d.) Coral reet management for sustainable tourism in Mu Koh Chang National Park.

 http://frc.forest.ku.ac.th/frcdatabase/bulletin/Document/Coral%20reet%20management%20%20f or%20sustainable%20to%20Tourism%20in%20Mu%20Koh%20Chang%20National%20Park.PD F (in Thai)
- Yeemin, T. and Panchaiyaphum, P. (2021). Action Plan of Thailand Coral Reef Management 5 Years (2022-2026). Department of marine and coastal resources. http://www.oic.go.th/FILEWEB/CABINFOCENTER15/DRAWER056/GENERAL/DATA0000/00000346.PDF (in Thai)

Wetlands

http://43.249.65.15/ramsarsite60/index.php

http://43.249.65.15/ramsarsite60/project/13/

http://43.249.65.15/ramsarsite60/project/14/

Thailand Institute of Scientific and Technological Research. (2022). Project on Increasing the Effectiveness of Thailand's Wetland Management Part 1: Main Report. (in Thai)