



Landscape strategy to strengthen adaptive capacity in society economic and ecosystem in Phang Nga Bay Landscape Thailand

Background

Phang Nga Bay is located in Andaman Sea coast or the south west coast of Thailand. It is connected area between Krabi Phang Nga and Phuket provinces. The sea ethnic group are Moken Moklen and Urak Lawoi which live in Krabi and Phuket

Phang Nga Bay consists of coastal areas beaches islands seagrass mangroves canals and rivers flow from mountain to the sea very high biodiversity it is a significant wetland in all local level, national level, and international level. For example, Krabi Estuary is a habitat of dugongs dolphins and sea turtles. Also it is an important resource base in economic for Andaman tourism which has world top attractions such as Koh Lunta, Koh Phi Phi, Koh Yao, and Phuket island a major fishing area for coastal communities who fish as a main occupation as well as food source extra income for communities The Covid-19 pandemic situation has affected on Andaman's tourism to shut down in tourist season between March and June 2020 include situation with no foreign tourists traveling all year round continue at least until quarter two of 2021 This has affect on communities with tourism business and economy was in recession for economic growth so people in coastal communities has adapted their occupation to do fishing and gleaning it is clearly see that marine resource base is a significant factor to support communities from economic crisis it is an ecosystem services crucial for life

Long term goal of Phang Nga Bay landscape is to strengthen adaptive capacity community based in social, economic, and ecosystem the strategy of project is ecosystem conservation and restoration, strengthen sustainable development, fair economy and society, considering of every member, and equality of women and men consist of small project and strategy project.

The small unit project is operated by community and Non-Governmental Organization which work with targeted group of communities in important sub-landscape of Phang Nga Bay landscape consist of community groups in Mu Koh Lunta, Sriboya bay, coastal area of Phang Nga bay in Krabi and Phang Nga province, Mu Koh Yao in Phang Nga bay, Koh Phuket, and the Andaman coast which is sea turtle nesting area. Moreover, there is operation in supportive gender equality and sea ethnic community which add up to 8 important ecological units in Phang Nga bay landscape. Each of small unit project will cover 4 areas which are Strengthening ecosystem service, Enhancing sustainable production, various career development, and reinforcement of good governance.

The strategy project connects each works of small unit projects covering strengthen plan of Phang Nga bay network, supportive laws and policies, community business development cooperates between community and local business sector, and knowledge and innovation development.

The results and indicators of the project is to achieve target framework and results of the project operation in GEF SCG 6th capital round in Thailand under the strategy of

enhancing the adaptive capacity of landscape-level areas for sustainable development and protecting the global environment.

1. Description of Phang Nga Bay landscape

1.1 location and boundary of Phang Nga bay landscape

Phang Nga Bay is located in Andaman Sea coast or the south west coast of Thailand. It is connected area between Krabi Phang Nga and Phuket provinces.

The border lines in Krabi consists of: At the southside of Phang Nga estuary is Koh Lunta Yai, Koh Lunta Noi, Koh Klang in Nuea Khlong district. The inner side of the bay consists of coast and island in Khlong Thom district, Koh Sriboya in Nuea Khlong district, Koh Klang in Mueang district and Ao Luek district.

The border lines in Phang Nga province which is located at the bottom of Phang Nga bay consists of coast and island in Thap Put district, Mueang Phang Nga district, and Takua Thung district.

The border lines in Phuket province which is located at the northside of estuary compose of Thalang district and Mueang Phuket district. Since ecosystem of Phang Nga bay is connected to Andaman sea which is a habitat of sea turtles and their nesting area is placed around Phuket island and the coast in Phang Nga province. In the conservation of Phang Nga bay seminar has agreement to expand the boundary in Phang Nga bay in order to cover the nesting area of sea turtles at Mai Khao beach in Hat Mai Khao sub-district Thalang district Phuket province, Ban Thap Yang in Tai Mueang sub-district, Ban Tha Din Daeng in Lam Kaen sub-district, Ban Khuk Khak in Khuk Khak sub-district Takua Pa district Phang Nga province

Phang Nga bay landscape has sea ethnic groups that should particularly pay attention on which are Moken, Moklen, and Urak Lawoi, who live in Krabi and Phuket.

1.2 Significant characteristics, issues, and strengths or advantages of Phang Nga bay landscape

Phang Nga Bay consists of coastal areas beaches islands seagrass mangroves canals and rivers flow from mountain to the sea very high biodiversity it is a significant wetland in all local level, national level, and international level. For example, Krabi Estuary is a habitat of dugongs dolphins and sea turtles. Also it is an important resource base in economic for Andaman tourism which has world top attractions such as Koh Lunta, Koh Phi Phi, Koh Yao, and Phuket island a major fishing area for coastal communities who fish as a main occupation as well as food source extra income for communities The Covid-19 pandemic situation has affected on Andaman's tourism to shut down in tourist season between March and June 2020 include situation with no foreign tourists traveling all year round continue at least until quarter two of 2021 This has effect on communities with tourism business and economy was in recession for economic growth so people in coastal communities has adapted their occupation to do fishing and gleaning it is clearly see that marine resource base is a significant factor to support communities from economic crisis it is an ecosystem services crucial for life

In the past, Phang Nga bay has suffered from the deterioration of natural resources as a result of Thai government's concession in mangrove forest. Moreover, Overfishing and destructive fishing threaten sea grass meadow and coral reefs. Also, tourism

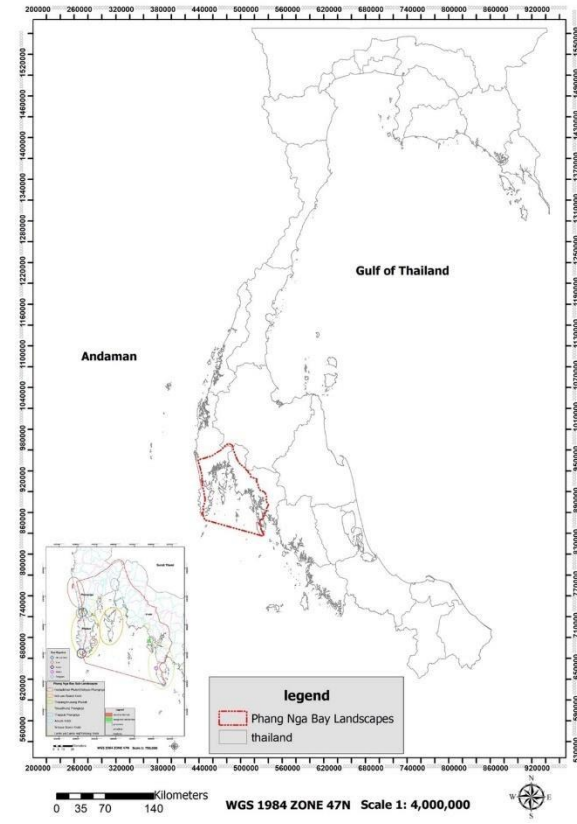
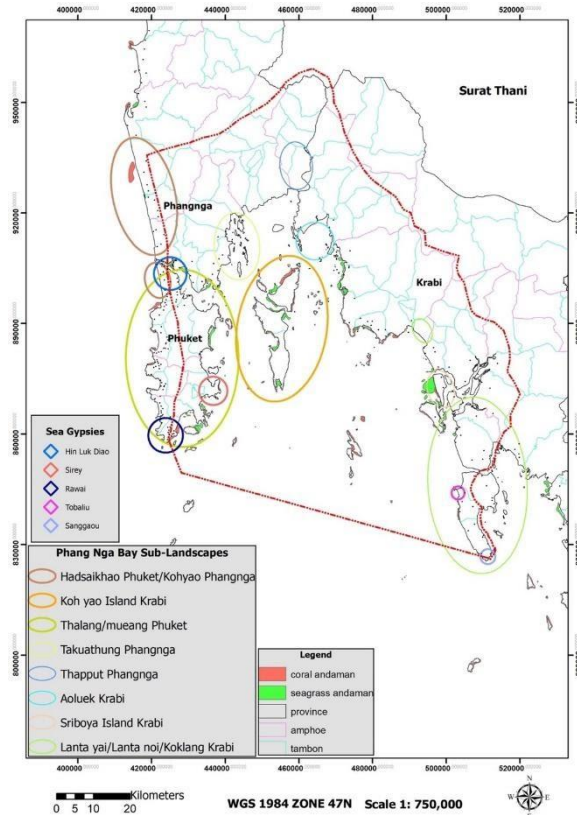
development grew rapidly has affected on forest and sea area invasion and coral destruction.

The deterioration of marine and coastal resources has impacted on the socioeconomic of coastal communities so mangrove and seagrass conservation group has established to resist mangrove deforestation to get rid of illegal fishing gear and change fishing method to be responsible and sustainable. Expansion of Phang Nga bay and coastal fisheries zone to protect marine resources and communities which has faced the damage from Tsunami incident were implemented restoration plan for communities after impact from Tsunami. Consequently, coastal communities in Phang Nga bay have experiences in restoration and conservation of natural resources. Collaboration with government, development parties, having campaigns in laws and policies, occupations development, and having local NGOs to conserve natural resources continuously. These people and organizations as listed are the major power of operating this project. In addition, this project is coordinated with local business people who have the concept of sustainable development and good governance in development to participate in strengthen Phang Nga bay landscape and enhance business development in tourism with local communities also increasing the value and quality of seafood and processing community product.

Between March 2020 until now and expected to continue through mid-2021, the community has suffered from the covid-19 pandemic situation, resulting in a severe economic recession, especially Phuket and Krabi which are tourist attractions from overseas. The communities have adapted from relied on tourism economy to fisheries and reliance on the sea and coastline. This condition has demonstrated the importance of ecosystem services that communities must conserve and restore marine and coastal resources, including conserving terrestrial forests in order to maintain and enhance the capacity of ecological services. Nevertheless, focusing on developing a wide range of occupations for local communities' base, supporting the uncertainty of external economic dependence.

Assessment of the adaptive capacity of the community landscape NGOs and development parties in seminars to prepare strategic and operational projects in the Phang Nga Bay landscape. There are common issues that need to be addressed together: Conservation of natural resources to be more fertile and balanced. Career development to build the local economy as a base for community development to be ready to cope with future crises and to create good governance in management both within the community, between communities, government and Development Parties

1.3 Map of Phang Nga bay landscape and the target areas to be operation



1.4 Relation of Phang Nga bay landscape with SGP and other UNDP projects in the same or similar landscape.

This project is related with 12th National Economic and Social Development Plan, the adaptation plan for the impacts of climate change, National Climate Change Strategy, and The Country's Greenhouse Gas Reduction Action Plan

This project is consistent with the policy of elevating small projects by communities into national level of GEF SGP which began in the 5th round action and was approved by the GEF Council in 2014, also results from this project was consistent with the strategic direction of SGP in 6th round action.

This project meets the sustainable development goals as follows: Goal 1 (End poverty in all its forms everywhere) Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture) Goal 13 (Take urgent action to combat climate change and its impacts) Goal 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development) Goal 15 (Protect, restore and promote sustainable use of terrestrial ecosystem, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss)

This project meets the results in the United Nations support framework in Thailand (UNDAF) Article 1 promotes comprehensive and sustainable development, create justice and reduce inequality, social sectors to achieve sustainable development.

Output 1.3 Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste

Output 1.4 Scaled up action on climate change adaptation and mitigation across sectors which is funded and implemented

Output 1.5 Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)

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

1.5 Phang Nga bay landscape with achievement objectives and results follow the project documents

The Phang Nga bay landscape has significant characteristics in being a model area to set up adaptive capacity at the landscape level in Phang Nga bay. It consists of a large bay area connecting 3 provinces with biodiversity and specific natural resources. Coastal communities in Phang Nga bay share the utilization of marine and coastal resources in fisheries and tourism. Most of people in communities are Muslims and have their culture. Members of Phang Nga bay development compose of: community, NGOs, business sectors, government, and academic sectors which have experience in conserving and protecting Phang Nga bay from unsustainable development. Working as a network and campaigning laws and policies are important part to achieve the goals in this project.

A small project that will operate under the 6th round action of GEF SGP project of the Phang Nga bay landscape is a small project with strategies, targets, and action plan

by each of small project will operate as a community group in the important sub-landscape of the Phang Nga bay landscape and have a plan to cooperate between a small project community level with business sector, academic sector, and NGOs with experienced in laws and policies. Therefore, it is a set of projects that have a good foundation to contribute to achieve goals of the project.

The strategy of the project set is to conserve and restore ecosystem, strengthening sustainable development, good governance in economic and society, considering of every member, and equality of women and men

Each small project will operate in 4 areas consisting of:

1. Strengthening ecosystem service
2. Enhancing sustainable production
3. Various career development and income generation opportunities
4. Reinforcement of good governance efficiency and equality operating by community organization and cooperation with local government and development parties

The small projects will be carried out with a community groups in significant sub-landscape of the Phang Nga bay landscape consists of:

1. Community groups in Koh Lanta Yai, Koh Lanta Noi, Koh Klang also Urak Lawoi community, Koh Lanta district, Krabi
2. Community group in Sriboya bay, Nuea Khlong district, Krabi
3. Community group in the coastal area of Mueang district and Ao Luek district, Krabi
4. Community groups at bottom area of Phang Nga bay in Thap Put district, Mueang district, Phang Nga
5. Community groups in the middle of Phang Nga bay 3 sub-districts in Koh Yao district Phang Nga
6. Coastal community groups in Phang Nga bay Takua Thung district, Phang Nga
7. Community groups in Thalang district and Mueang Phuket district, Phuket
8. The area overlaps between seagrass meadow on the coast of Phuket island Phang Nga bay side to the Andaman coastline at Mai Khao beach, Phuket province and Tai Mueang district, Phang Nga province which is habitat and nesting area of sea turtles
9. The project that operates with two specific target groups are female and male role project and community of sea ethnic on Phuket island project

The implementation plan in the strategic project consists of:

1. Plan to strengthen Phang Nga Bay Cooperation Network between Community and Development Parties
2. Plan to support relevant laws and policies
3. Community business development plan by cooperation between local communities and business sectors such as tourism, seafood, organic vegetables
4. Knowledge and innovation development plan

The community and the Development Party have set out a joint strategy and targeting the targeted areas of communities in the sub-landscape of Phang Nga Bay, and having a joint strategic plan above will enable the implementation to achieve goals, objectives, and results according to the project documents.

2. Situation Analysis

2.1 Methodology

Selection process of sub ecosystem landscape areas in Phang Nga bay by consultations with representatives of local NGO, businesspersons, government partnership, and community organizations to review the strategy and set out a framework for small projects. Within the framework of the consultative meetings, the participants worked with SEPLS indicators, and other tools used to mobilize participation including mapping of natural resources and communities in sub ecosystem Phang Nga bay landscape, Assessment of the adaptability of the landscape according to 20 indicators and the preparation of radar chart to analyze the current condition, design 10-year goal of Phang Nga bay landscape, design 2-year goal of sub ecosystem in Phang Nga bay landscape, Analysis of the limitations and potential to be achieved in 2 years, and design the results and activities to create the 18-month project. Moreover, 12 meetings consisting of 6 meetings in Krabi, 3 meetings in Phang Nga, 2 meetings in Phuket, and 1 meeting for development projects of the participation of female and male of representatives in sub ecosystem in Phang Nga bay landscape areas were held. Each meeting had participants around 20-30 people total of participants in all meetings were 303 people, 145 people were female and had village chief and local administrative organizations participated.



Participants of the landscape strategy Phang Nga bay meeting, held on 27-28 October at Phang Nga



Consultation meeting of local stakeholders in one of sub ecosystem landscape areas.

2.2 Results of Baseline Analysis

2.2.1 Community groups in Koh Lanta Yai, Koh Lanta Noi, Koh Klang

Landscape diversity and ecological protection currently at 3.75. In the future, it can reach level 4. The biodiversity in the present is 3.6% but has enough potential to evolve to 4.67% in the future. Knowledge and innovation side is quite mild but in the next 10 years 10 equipment can be used to help develop more. Good Governance and Social Equality are currently at level 3.1 In the future, there will be cooperation from many sectors to help development For livelihoods and well-being, in the future they will expand the framework to a level 4.

2.2.2 Community group in Sriboya bay, Nuea Khlong district, Krabi

Landscape diversity on Sriboya Island is diverse for both animals and plants as a food source. In the next 10 year, predicted it will reach level 4 which depends on the subconscious of the community. Biodiversity currently scores as 3, In the future will improve with the right development tools. Current score for knowledge and innovations is 3.25. In the future, if funds are provided to youths and villagers and cooperation from many sectors will improve this side. Good Governance and Social Equality Currently quite good. Looking at the work of women and men Women will play a greater role. Livelihoods and well-being Nowadays, it is not in a good shape. Helping to promote a stable and sustainable career so in the next 10 years, livelihoods and well-being will improve.

2.2.3 Community group in the coastal area of Mueang district and Ao Luek district, Krabi

Diversity of landscape and ecological protection is currently at 3.8 and it will score up to 4 in 10 year because there is a lot of diversity in the area and also the increase of career diversity as well. Biodiversity side, agriculture in the area plants more mixed crops. Economy in the household gets better. Increase consumption of local vegetables.

Knowledge and culture of older generations about fishing tools are gradually disappearing into the younger generation. Governance and Social Equality Women play a huge role. Started having directors as women. There are laws and regulations in use. Livelihood and Well-being Social and environment is decreased because not enough natural resources to utilize. More management needs to be made.

2.2.4 Community groups at bottom area of Phang Nga bay in Thap Put district, Mueang district, Krabi

The ecological diversity of these two areas are similar. Mainly is mangrove forest which will increase mangrove forest area in 10 years. Biodiversity is now quite abundant. There are a lot of fish in the area so local people can use this as a food source because the number of tourists is declining. Finding new ways to increase income. Knowledge and innovation must improve, these 2 districts are not good in giving knowledge to villagers. Help is required from government sectors. Governance and Social Equality, two districts are writing the laws about using natural resources in the sea and forests. Livelihood and well-being, 90% household land in these two districts have no title deed. Seeking for help from government sectors to solve the problem. In the next 10 year knowledge and innovation Governance and Social Equality And livelihood and well-being all need to improve because villagers lack knowledge. Educate villagers to help develop an ecosystem which is connected to tourism and livelihood of villagers. Ecological diversity and biodiversity must be emphasized because it involves a livelihood in the community.

2.2.5 Urak Lawoi community, Koh Lanta district, Krabi

Area diversity, most of the area is by the sea. There are problems about household habitat and career. Biodiversity side, lifestyle of people use a modest pattern, catch fish just enough to eat and save small amounts to sell. Sustainable fishing style. Livelihood and innovation, learning to pass on knowledge to next generation people to be more knowledgeable. Today's governance and equality are moderate, which in the future can create greater equality. Livelihood and well-being is relatively low. In the future, this aspect must be improved. Increased habitat for better well-being

2.2.6 Coastal community groups in Phang Nga bay Takua Thung district, Phang Nga

Landscape diversity of Takua Thung district today is very good because of the mangrove forest area and fertile marine resources. But in the next 10 years, it will be less diverse because there will be more tourists. Biodiversity is currently well-qualified but, in the future,, it will be slightly regression, but it can also be solved by the villagers in the community. Today's knowledge and innovations are quite good. In the future, knowledge will go down because marine resources might decrease and younger generations may develop knowledge less than older generations because too much technology. Governance and Social Equality currently, it is well qualified. In the future, females may play a greater role than males, causing slight inequality. Livelihoods and well-being currently, the post-COVID situation is quite bad. Both in fisheries and tourism. In the future, supported by government sectors can help to increase the likelihood of creating more careers. For example, the government supports the making of crab banks.

2.2.7 Community groups in Thalang district and Mueang Phuket district, Phuket

Diversity of landscape and the system to take care of diversity may not be thorough. In the future, it is likely to be reduced further. The biodiversity of the present is quite good. Knowledge and innovation have knowledge of the old generation but in the future, new technologies and knowledge can be improved. Online media is available to help increase knowledge. Governance and equality are well qualified. And in the future, the equality framework can be expanded even further. The aspects of livelihood and well-being are currently scored at 3. In the future, it is possible to improve well-being.

3. Landscape Strategy

3.1 Guidelines for landscape development

Evaluation of ability to adapt capacity of landscape with 20 indicators and make radar diagrams of the Phang Nga bay landscape at the meeting of the strategic preparation and operation of small projects in Phang Nga bay landscape on 26-27 October, it was found that

Sub-landscape areas in Phang Nga bay landscape have marine and coastal resources as well as upstream forests which are necessary to be protected and conserved by community, local NGOs, and related development members. These areas compose of watershed forest, mangrove forest, Nipa palm, Saku tree forest, and seagrass which all of these are habitat of dugongs, sea turtles, dolphins, hornbills, red hawks, and bats. At present, natural resources are in good level of fertile but has degraded in some areas. Ecosystem services in food, fishing, tourism, and monsoon are all sufficient to take care of people in community and have extra resources to make an income. In the future, there is a risk that the ecosystem will be degraded or damaged due to development in tourism and coal power plant. Therefore, it is necessary to preserve the ecosystem and to protect natural resources from risks in the future.

In economy and career, the impact from Covid-19 pandemic has affected on tourism business which are a significant business in Phang Nga bay community to cause the closure of tourism services between March and June 2020. Decreasing in number of Thai tourists and absence of foreign tourists until 2021 has resulted in reduction of income for people in the community, lay-off from work, and decrease in seafood price. So, the communities need to adapt by creating more various occupations, depend more on food from ecosystem services, strengthen in local business development and less rely on outside business also managing sustainable tourism on ecosystem base prepare for return of tourists in the future.

Knowledge in community, passing on generation to generation has to be developed to conform with local economic development. Nevertheless, adaptation of changes in development, Information and Technology, and climate change.

Good governance in development, overall is in a good picture but tends to be reduced due to the laws and policies related to natural resources and environment management by less focus on community's participation so people in communities have to improve good governance in development system. To create participation of all parts within community along with manage system with government in conservation restoration and utilize natural resources sustainably.

Phang Nga bay landscape has sea ethnic community consist of Urak Rawoi, Moken, and Moklen communities. With ethnic constraints, these communities are not receiving the right in land development which is cultural area and fishing as a traditional occupation of the communities. Therefore, the project will specifically operate with this community including plan to strengthen the capacity of the community in Phuket island area and create network between coastal communities in Koh Lunta Yai.

3.2 The long-term goal of the landscape is to strengthen the adaptive capacity in society, economic, and community-based ecosystem under co-strategy of the projects which are conservation and restoration of ecosystem to be balanced, strengthening sustainable development, good governance in economic and society, considering of every member, and equality of women and men

Expected outcomes and indicators of projects

Outcome 1: 7 important ecological units in Phang Nga bay landscape and the habitat of dugongs and sea turtles have been restored and conserved, enhancing the capacity of the ecosystem service, consisting of seagrass meadow, mangrove forest, corals, marine biomass, biodiversity, upstream forests and prevent environmental pollution from marine litter.

Indicator 1.1: Conservation and restoration of seagrass fields of at least 3,500 rai

Indicator 1.2: Mangrove Forest, Nipa palm, and Saku forest conservation and Restoration at least 12,000 rai

Indicator 1.3: To do crab bank, artificial fish apartment, shell conservative area to conserve and restore sea animals at least 60 areas

Indicator 1.4: Management of terrestrial forest and beach forest in 5 areas

Indicator 1.5: Write the rules to manage ecosystem in communities at least 40 communities

Indicator 1.6: Management of turtles spawning area at least 5 communities

Outcome 2: The development and enhancement of sustainable production systems consists of the development multilayer cropping system, organic agriculture, free from pesticides or herbicide which have effect on ecosystem, aquaculture breeding conservation for food security, responsible and sustainable fisheries such as suitable fishing gear specify size of fish for fishing.

Indicator 2.1: Organic farm, mixed garden, and integrated farming at least 500 Rai

Indicator 2.2: At least 40 communities have established sustainable fishing rules.

Outcome 3: Create a various career on the basis of a balanced ecosystem and a local economy in order to be ready for the economic crisis from the Covid-19 pandemic, climate change and other emerging diseases that will occur in the future. By operating cooperation between the community and the business sector such as community tourism, sustainable fisheries, seafood processing product, Bee processing product, and shrimp paste, etc.

Indicator 3.1: At least 20 communities have been established groups to develop careers.

Outcome 4: Community organizations have good governance in the management system. Development that creates fairness for all groups. Women play a meaningful role in development.

Cooperating partnerships with the development sector to improve community regulations, local government organizations, and state the policies to facilitate for sustainable and development, especially for sea ethnic groups.

Indicator 4.1: Women have a role in community development and management in at least 20 communities.

Indicator 4.2: community organization and community leader have ability to manage 40 community organizations

4. Typology of Community-managed projects and criteria for project selection include:

4.1 It is a project run by a local community or NGOs through community participation.

4.2 It is a strategy project, long-term goals, and specific targets for project operations are in line with the goals and strategies that multilateral networks in the Phang Nga bay landscape have jointly established.

4.3 It is a project conducted in collaboration between communities in the 7 critical sub-ecosystem of the Phang Nga Bay landscape, or as a project that works with the sea ethnic group, or as a project aimed to promote women to play a meaningful role in enhancing adaptation in the Phang Nga bay landscape.

4.4 It is a project that has been carefully considered to achieve SEPLS results.

4.5 It is a project that community organizations or NGOs who have proposed to pay attention on development of the Phang Nga bay landscape and policy development and cooperation with the government

4.6 Examples of projects based on the above criteria, such as enhance community potential in management and sustainable development in Koh Lunta, Koh Yao, Ao Phang Nga ecosystem project, or promoting the role of women and men in the management of phang nga bay landscape project, or to create fairness in the development of the sea ethnic community of project.

5. The landscape monitoring and evaluation plan consists of:

5.1 Monitoring and Evaluation at the Landscape level

Operate database for natural resources and community economic system in the early stages of the project as guideline for small projects to track the progress and evaluate project performance. The development of monitoring system and the preparation of indicators by participation of community, so that small projects can be used to record progress, reporting, monitoring, and evaluating the projects. Moreover, arrange the meeting to present the progress of small projects in the middle of the project and the phase before the end of the project to create the learning, improvement, and development of corporate operations.

5.2 Monitoring and Evaluation at the Project level

Using individual projects as a database to develop M&E framework for Project level that has indicators parallel to Landscape strategy outcomes and indicators. The project team will also arrange the progress meeting during the project and before the end of the project to achieve the goals.

6. Managing knowledge at the landscape level plan divided into 3 parts:

6.1 To develop a concrete and innovative KM plan and strategy for the country program's and GEF's visibility and knowledge sharing innovation

- Knowledge management from the operation of small projects in the initial stage of small project operations
- Each project will define a framework and roadmap for managing the knowledge generated by the implementation of the project.
- Write the knowledge management report in several phases and exchange with the landscape network.
- Prior to the end of operation, the project will be a combination of knowledge at the Phang Nga bay landscape level.

6.2 To maximize highest impact of project implementation in upscaling and replication; and to build a knowledge sharing network

- Selection of 10 case studies to cover 4 aspects of SEPLS such as restoration and conservation of mangrove ecosystems, conservation of seagrass ecosystem, conservation and management of the beach which is the spawning area of sea turtles by the community, community product development from bees, community tourism development, and development of community business system cooperation with local business sectors, etc.

6.3 To ensure that visibility and dissemination of good practices and lessons learnt will be carried out

- The knowledge from the implementation of small projects in Phang Nga bay landscape level and the knowledge set from case studies can be synthesized and upgraded into a series of knowledge
- Using lessons and knowledge to develop projects or activities, strengthening the capacity of the community and managing the landscape for sustainable development and protecting the global environment in the future.

**The adaptive capacity of the landscape plan.
Phang Nga Bay landscape in Phuket, Phang Nga and Krabi provinces.**

Long-term goal (10years): Ecosystem of Phang Nga Bay is fertile and balanced, sustainable development, good governance in economic and social system considering of every member, and equality of women and men in development			
The desired results from the project (3-5 years) and the project/activity to be performed.			
<p>Result 1 7 important ecological units in Phang Nga bay landscape and the habitat of dugongs and sea turtles have been restored and conserved, enhancing the capacity of the ecosystem service, consisting of seagrass meadow, mangrove forest, corals, marine biomass, biodiversity, upstream forests and prevent environmental pollution from marine litter.</p>	<p>Result 2 The development and enhancement of sustainable production systems consists of the development multilayer cropping system, organic agriculture, free from pesticides or herbicide which have effect on ecosystem, Aquaculture breeding conservation for food security, responsible and sustainable fisheries such as suitable fishing gear specify size of fish for fishing.</p>	<p>Result 3 Create a various career on the basis of a balanced ecosystem and a local economic in order to be ready for the economic crisis from the Covid-19 pandemic, climate change and other emerging diseases that will occur in the future. By operating cooperation between community and the business sector such as community tourism, sustainable fisheries, seafood processing product, Bee processing product, and shrimp paste, etc.</p>	<p>Result 4 Community organizations have a good governance in management system. Development that creates fairness for all groups. Women play a meaningful role in development. Cooperating partnerships with the development sector to improve community regulations, local government organizations, and state the policies to facilitate for sustainable and development, especially for sea ethnic groups.</p>

<u>Description of Project that should be supported</u>	<u>Description of Project that should be supported</u>	<u>Description of Project that should be supported</u>	<u>Description of Project that should be supported</u>
			-The project promotes the role of women in development on the basis of ecosystem and sustainable development. -The Project to promote the rights of the sea ethnic migrants in the field of land, the right to do sustainable fishing and the rights in cultural tradition

Description of project that should be supported

- 1) The project promotes the role of women in development on the basis of ecosystem and sustainable development.
- 2) The Project promotes the rights of the sea ethnic groups in the field of land, the right to do sustainable fishing and the right in cultural tradition
- 3) The project aims to achieve results in all 4 aspects consistently, with target to promoting the ability of community to be the main unit to operate in both between project operations and after the end of the project
- 4) Project aims restore and conserve ecosystem by community and operating in important ecological areas of Phang Nga bay landscape such as estuary area around Phuket Island and Koh Lanta, Bottom of Phang Nga bay area in Takua Thung district Mueang district Thap Put district in Phang Nga province, Ao Luek district Muang district Nuea Khlong district in Krabi Province
- 5) Project of habitat protection, spawning area of sea turtles or dugongs by community participation

References: United Nations Thailand. Retrieved from <https://thailand.un.org/en/sdgs/10>