



CAMBODIA

NATIONAL STRATEGY AND ACTION PLAN 2014-2016

MANGROVES FOR THE FUTURE



June 2013

A Message from H.E Dr. Mok Mareth
Senior Minister, Minister of Environment and Deputy Chair of National Committee for
Management and Development of Cambodian Coastal Areas

National Strategy and Action Plan (NSAP) 2014-2016 of the Mangroves for the Future (MFF) Initiative of Cambodia was developed by the Executive Board for Mangroves for the Future Initiative of Cambodia (EB-MFF-CAM), composed of line ministries, international and local non-governmental organizations and academia. It sets out priority strategies and action plans to protect, manage and conserve the coastal ecosystems in a sustainable way and highlights priority coastal management issues and areas of action that are taken forward through MFF to effectively address the on-site concerns and issues to maintain the environmental balance and ecosystems and the sustainability of the growth of the national economy. A number of different agencies and organizations will participate in implementing strategies and action plans on the ground to ensure the protection and conservation of the coastal ecosystems and sustainable development.

The Ministry of Environment and relevant ministries recognize strong links between coastal ecosystem degradation and the persistence of poverty in rural coastal communities and urgent needs to protect and conserve mangroves, seagrasses, coral reefs and other coastal ecosystems for the next generation. In order to reverse the trend of the degradation of coastal ecosystems and the growing vulnerability of coastal peoples, the Ministry of Environment, relevant institutions and other coastal stakeholders have developed and will implement robust high level strategies and action plans with high attention to ensure the sustainable protection and conservation of coastal ecosystems and improved local coastal communities' livelihoods.

This National Strategy and Action Plan indicates a clear-cut vision to implement policy and strong commitments of relevant ministries and stakeholders to supporting and providing the enabling conditions for effective integrated management of mangroves, seagrasses and other coastal ecosystems because a broad range of action plans and strategies have been clearly developed to maximize the benefits and help secure the long-term future of mangroves and other coastal ecosystems and the people who are dependent on for their sustainable livelihoods.

On behalf of the Ministry of Environment, I would like to deeply thank and highly appreciate the Executive Board for Mangroves for the Future initiative of Cambodia involved in developing the national strategy and action plan for MFF in Cambodia and regional and Cambodian MFF/IUCN staff.

I hope that this plan 2014-2016 will be translated into practice to address the growing challenges and issues and protect the coastal ecosystems in a highly effective way and ensure the viable development.

Once again, I would like to call on all development partners, national and sub-national institutions and all levels of coastal communities to actively participate in the implementation of strategies and action plans to achieve the sustainable protection and conservation of coastal resources to improve the living conditions of rural coastal dwellers and promote the national economy of Cambodia.

Phnom Penh, Date: ^{26th} June 2013

Senior Minister, Minister of Environment
Deputy Chair of National Committee for Management
and Development of Cambodian Coastal Areas



H.E Dr. Mok Mareth

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On behalf of the Executive Board for Mangroves for the Future initiative of Cambodia, I would like to express the deep sense of thanks to **H.E Dr. Mok Mareth**, Senior Minister, Minister of Environment and Deputy Chair of National Committee for Management and Development of Cambodian Coastal Areas for his strong support and ideal guidance for the formulation of Cambodian National Strategy and Action Plan 2014-2016 to protect and conserve the coastal ecosystems of Cambodia.

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Finally, on behalf of the Executive Board for Mangroves for the Future initiative of Cambodia, it is strongly committed to increasing cooperation with relevant institutions, sub-national administration, international and local organizations in promoting the successful implementation of the National Strategy and Action Plan 2014-2016.

Phnom Penh: Date 26th June 2013

**Deputy Director General of Technical Affairs
of Ministry of Environment
Chair of Executive Board for Mangroves
for the Future Initiative**



Dr. Vann Monyneath

List of Abbreviations and Acronyms

ADB	Asian Development Bank
C-NSAP	Cambodian National Strategy and Action Plan
DFC	Department of Fisheries Conservation
DRR	Disaster Risk Reduction
EB-MFF-CAM	Executive Board for Mangroves for the Future Initiative of Cambodia
EIA	Environmental Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
FiA	Fisheries Administration
GHGs	Green House Gases
GIS	Geographic Information System
GPS	Global Positioning System
Ha	Hectare
ICM	Integrated Coastal Management
IUCN	International Union for Conservation of Nature and Natural Resources
Km	Kilometer
Km ²	Square Kilometer
MAFF	Ministry of Agriculture, Forestry and Fisheries
MFF	Mangroves for the Future
MFMA	Marine Fisheries Management Area
MoE	Ministry of Environment
NCB	National Coordinating Body
NGO	Non-Governmental Organization
PES	Payment for Ecosystem Services
PKWS	Peam Krasop Wildlife Sanctuary
PoW	Programme of Work
REDD	Reducing Emissions from Deforestation and Forest Degradation
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
WI	Wetlands International

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CHAPTER 1

INTRODUCTION

1.1 Background

Cambodia has its 440 kilometer-long coastline scattered with mangrove forests, coral reefs, seagrass beds and other coastal ecosystems which play a significant role in ecosystem productivity and the benefits of the human being. The coastal area is an essential natural habitat to numerous species. It has been reported that aquatic fauna found in the coastal and marine areas and of significant values of biodiversity conservation include marine mammals such as the dugong and marine dolphins, whale, marine turtles, crustaceans and mollusks (MoE & NBSC, 2002). These ecosystems are fundamental to the livelihoods of millions of Cambodians and to the nation as a whole. Not only do they perform an essential role in supplying people with fish, a staple food rich in protein for Cambodians, but are also vital to coastal protection, tourism and biodiversity (FiA, 2006).

Natural ecosystems of mangroves, coral reefs and seagrass beds all provide a wide range of services to Cambodia—fishing for critical food resources, coastal protection, tourism and biodiversity. They also provide important natural habitats essential to sustaining the marine fisheries of Cambodia. Destruction of these natural habitats results in a loss of breeding, spawning, nursery and feeding grounds for many marine species, leading to a reduction in fish stocks and other coastal and marine fauna and flora and to serious impacts on human well-being. The conservation and management of mangroves, coral reefs and seagrass beds are therefore vital to the sustainable management of coastal and marine fisheries and to ensure Cambodia's people continue to gain economic, cultural and nutritional benefit from the resources (FiA, 2006). Management of the resources and livelihoods options can be achieved through a better understanding of the potential of coastal habitats and their use, integrating fisheries into habitat conservation and management, promotion of co-management arrangements in community fisheries, stakeholder involvement and cooperation and comprehensive livelihood plan and programs for coastal communities (WI, 2012).

Coastal wetlands in Cambodia have not received the same attention as freshwater wetlands. However, in the recent years, coastal wetlands of Cambodia have been gaining attention because it was recognized that many rural poor people are reliant on the collection of coastal resources for their livelihoods and household income generation (WI, 2012) and the significant roles healthy coastal ecosystems play in reducing vulnerability to hazards by supporting livelihoods and in acting as natural physical buffers "natural infrastructure" to reduce the impacts of hazard events (Sudmeier & Ash, 2009).

There is a strong inter-relation between ecosystem health and human livelihoods in the coastal zone. Coastal ecosystems support human well-being through a wide range of services they offer—through provisioning, supporting, regulating and cultural services. Ecosystems need to be maintained and protected in a good condition—and even improved—if they are to continue to provide these essential services to humankind. Mangroves and other coastal forests and wetlands, estuaries, lagoons, sandy beaches, sand dunes, coral reefs and seagrass communities are under threats from coastal erosion, sand mining, water pollution, natural and anthropogenic natural habitat destruction and decades of ill-planned and unsustainable development activities, and these pressures continue to intensify (IUCN & UNDP, 2007).

In order to deal with increasing challenges to the sustainability of coastal areas, Mangroves for the Future (MFF) is founded on a strategy of making knowledge available, empowering institutions and people to use that knowledge, and thereby enabling them to participate more effectively in decision-making and in promoting good governance in coastal areas (IUCN & UNDP, 2007) to protect and use those coastal resources sustainably and wisely.

1.2 Mangroves for the Future (MFF) initiative

Known as MFF, Mangroves for the Future is a partnership-based initiative promoting investment in coastal ecosystems for sustainable development. MFF provides a collaborative platform to help countries, sectors and agencies in the MFF region to tackle the growing challenges to coastal sustainability. MFF has adopted mangroves as its flagship ecosystem in recognition of the important role that mangrove forests played in reducing the impact of the 2004 Indian Ocean tsunami, and the severe effect on coastal livelihoods caused by the losses and degradation of mangroves. However MFF embraces all coastal ecosystems, including coral reefs, estuaries, lagoons, wetlands, beaches and seagrass beds.

This inclusive approach reflects the ecosystem-based, or “reef to ridge”, management approach that MFF brings to the rehabilitation and stewardship of coastal resources. Coastal ecosystems, and the well-being of their inhabitants, are influenced not only by activities carried out in the coastal zone, but also by those happening further inland. Using the reef to ridge approach, MFF helps coastal managers and communities to adopt and benefit from more integrated management of coastal resources and the ecosystem processes that support them.

MFF continues to work towards achieving the vision of a healthier, more prosperous and secure future for all coastal communities. The mission of MFF is to promote healthy coastal ecosystems through a partnership-based, people-focused, policy-relevant and investment-orientated approach, which builds and applies knowledge, empowers communities and other stakeholders, enhances governance, secures livelihoods, and increases resilience to natural hazards and climate change. The goal of MFF is for the conservation, restoration and sustainable management of coastal ecosystems as key natural infrastructure which supports human well-being and security.

1.3 Mangroves for the Future initiative in Cambodia

Cambodia is currently an MFF Outreach country, and in this respect receives general support for preparing to become a full member country of MFF in the future. The process of becoming an MFF member country includes four main steps:

1. Drafting a scoping report or situational analysis to provide the background and context for coastal management in the country, including; state of the coastal ecosystems, major threats and issues, institutional arrangements, policies and legislation for the management of coastal resources.
2. Establishing the National Coordinating Body (NCB) for MFF. In Cambodia the NCB is called the Executive Board for Mangroves for the Future Initiative of Cambodia (EB-MFF-CAM).
3. Developing and adopting Cambodia's National Strategy and Action Plan (C-NSAP) for MFF
4. Developing projects—to provide opportunities to implement priority project activities and actions as outlined in the C-NSAP.

Cambodia has adopted regional vision, mission, goal and objectives in its own context to ensure that coastal ecosystems are healthy and well managed and protected and food security is secured for coastal communities.

1.3.1 Vision

The vision of MFF is for a healthier, more prosperous and secure future for all coastal communities

1.3.2 Mission

The mission of MFF is to promote healthy coastal ecosystems through a partnership-based, people-focused, policy-relevant and investment-orientated approach, which builds and applies knowledge, empowers communities and other stakeholders, enhances governance, secures livelihoods, and increases resilience to natural hazards and climate change.

1.3.3 Goal and objectives

To achieve its goal of conservation, restoration and sustainable management of coastal ecosystems as key natural infrastructure which support human well-being and security, MFF implements actions guided by three main objectives:

1. Improve, share and apply knowledge to support the conservation, restoration and sustainable use of coastal ecosystems;
2. Strengthen integrated coastal management institutions and empower civil societies (including local communities) to engage in decision-making and management that conserves, restores and sustainably uses coastal ecosystems;
3. Enhance coastal governance at all levels (regional, national, sub-national and local) to encourage integrated management programmes and investments that are ecologically and socio-economically sound, and promote human well-being and security.

1.3.4 Guiding principles

- Mangroves and other coastal biodiversity resources are of ecological, economic, social and cultural significance
- Coastal people are dependent on the collection of coastal biodiversity resources and get involved in the protection and sustainable and wise use
- Healthy coastal ecosystems are key natural infrastructure supporting human well-being and security and reducing vulnerability to climate change
- Knowledge, empowerment and governance in terms of coastal fisheries sector are the key pre-requisite to the long-term sustainability of coastal ecosystems and local livelihoods.
- Recognizing the interconnected nature of healthy coastal ecosystems and local needs to sustain their livelihoods.
- Applying participatory, transparent, culturally appropriate, gender inclusive and equitable approaches in addressing coastal issues.

1.4 Establishment of Executive Board for Mangroves for the Future initiative of Cambodia

The EB-MFF-CAM was established on 15 June 2012 and approved by the Ministry of Environment of Cambodia on 12 October 2012.

The EB-MFF-CAM is composed of 14 members, representing 5 ministries, 4 international and local organizations and one academic institution. There are no private sector representatives in this executive board as yet. A full list of members and Terms of Reference for the EB-MFF-CAM can be found in annex.

The EB-MFF-CAM is responsible for coordinating MFF in Cambodia and for developing and implementing coastal management initiatives at the national and sub-national levels. The EB-MF-CAM provides a forum to foster improved dialogue, planning and decision-making between the different government agencies and non-governmental organizations involved in coastal management and development within the context of MFF and in relation to broader issues and concerns of coastal ecosystem management in Cambodia.

The EB-MFF-CAM serves to strengthen regular communication, learning and information-sharing between coastal managers and implementers of coastal management projects within Cambodia and disseminate knowledge and experiences with other MFF countries through the regional knowledge sharing platform.

The EB-MFF-CAM was officially recognized by a decision of the Senior Minister, Minister of Environment of the Royal Government of Cambodia. It is chaired by H.E Dr. Vann Monyneath, Deputy Director General of Technical General Department of Ministry of Environment with its members of both government and civil society (including NGOs, academic institution) currently working on the coastal area management and protection.

The work of the EB-MFF-CAM is guided by Cambodia's National Strategy and Action Plan (C-NSAP) for Mangroves for the Future which has been developed based on consultations with national and local stakeholders to identify key coastal management priorities and actions over the next three years (2014-2016).

1.5 National Strategy and Action Plan development process

The purpose of the Cambodia's National Strategy and Action Plan (C-NSAP) is to identify priority coastal management issues to be addressed in Cambodia and relevant strategies and actions to address them. The C-NSAP is developed in consultation with all relevant government and non-government stakeholders. The C-NSAP compliments existing national government policies and development strategies which provide a guide for priority investments in coastal ecosystems management in Cambodia over the next three years.

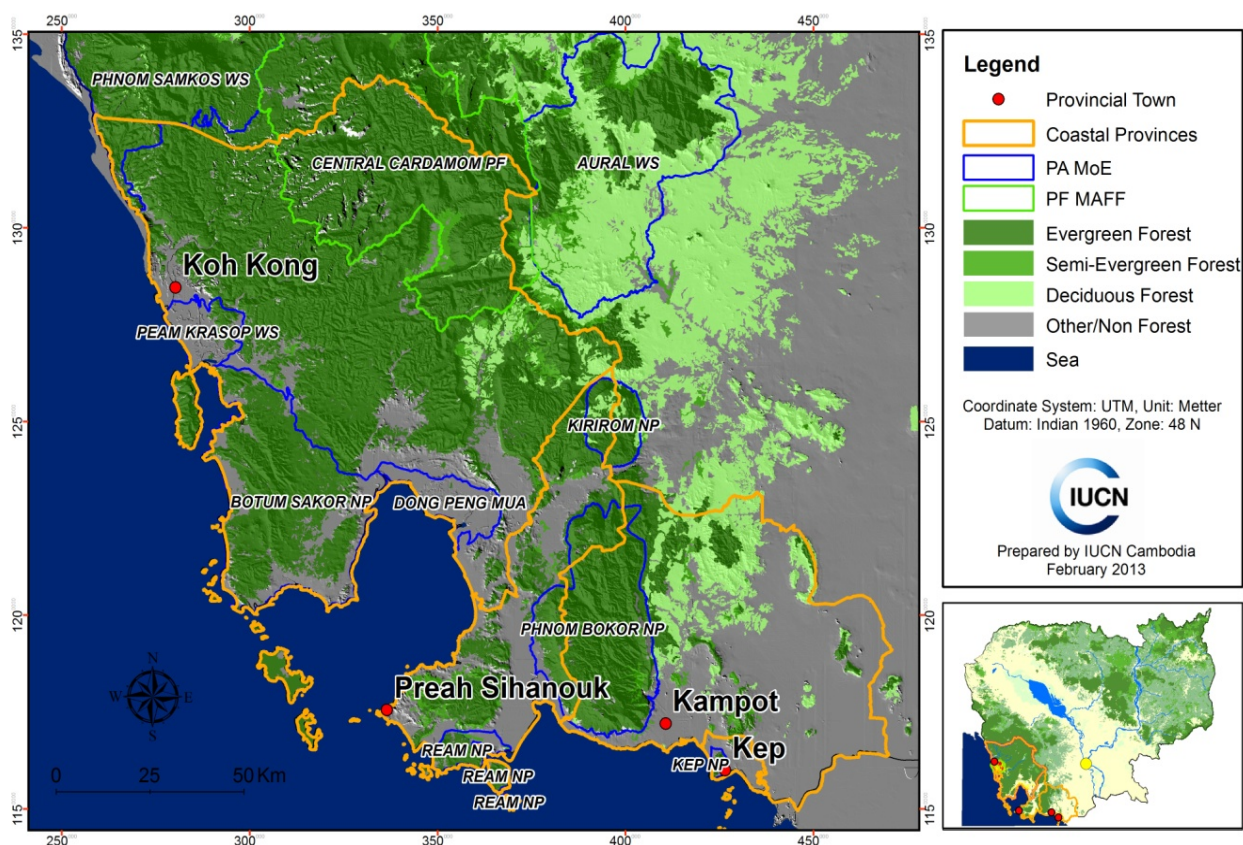
The C-NSAP makes reference to the scoping report and other similar sources of contextual information relevant to management of the coastal environment as a basis upon which to develop priority strategies and actions and to highlight priority coastal management issues and areas of action that can be taken forward through MFF and other sources of project activities. The C-NSAP will be implemented through a series of individual projects that are linked by a common goal and strategy, but are spread out geographically, temporally, and in terms of management and implementation responsibility. A number of different agencies and organizations will participate in implementing these actions on the ground. The EB-MFF-CAM is responsible for coordinating and steering the development and implementation of project initiatives at the national and sub-national levels.

CHAPTER 2

STATUS OF COASTAL AND MARINE ECOSYSTEMS IN CAMBODIA

2.1 Current state of coastal and marine ecosystems

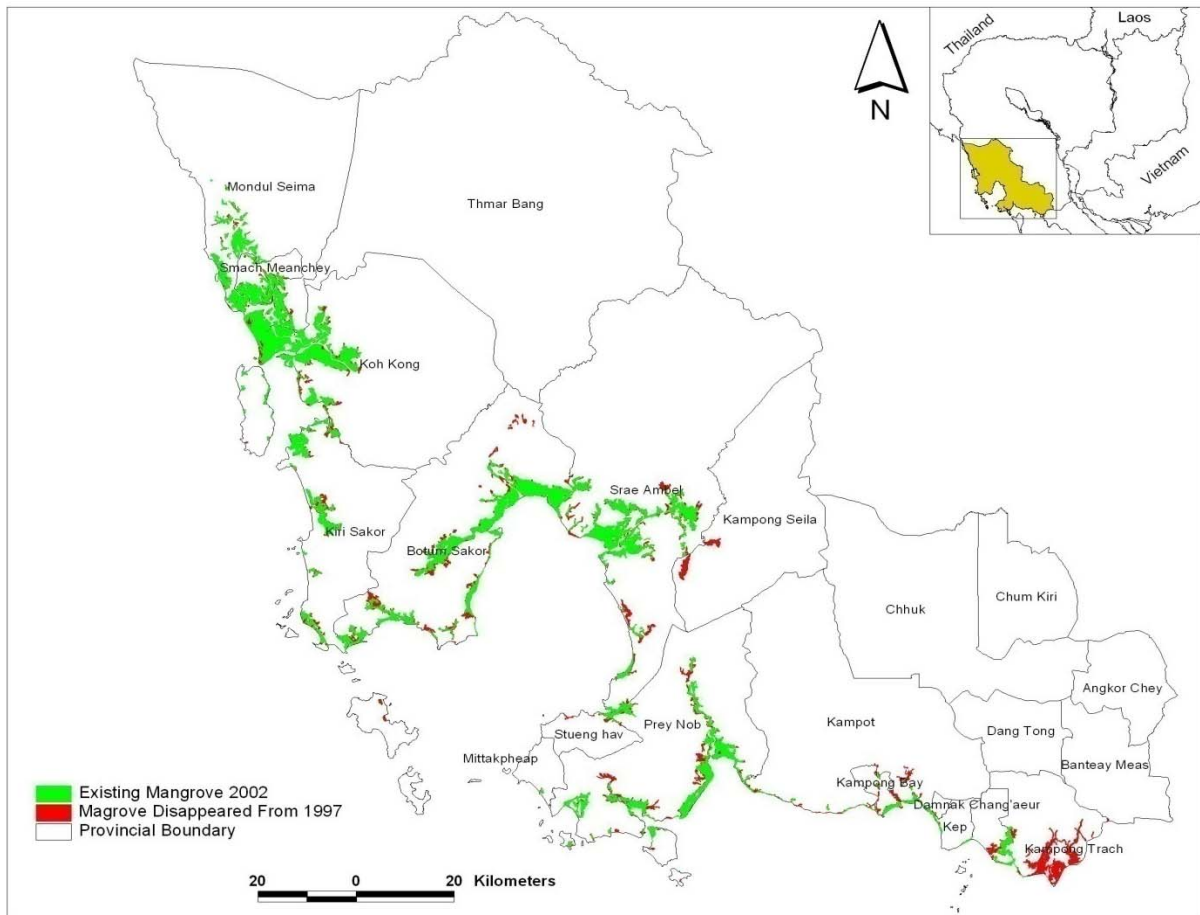
Cambodia has 24 municipality and provinces, four of which are coastal provinces of Kampot, Kep, Preah Sihanouk and Koh Kong with its length of coastlines being 440 Km. Cambodia remains one of the Southeast Asian countries rich in the natural resources. The coastal and marine ecosystems including mangrove forests, coral reefs, seagrass beds, salt marshes and estuaries are extremely important to Cambodia's economic development as well as local people. According to coastal study done by ADB (2000), coastal and marine biodiversity provides substantial benefits of estimated USD12 million annually to local communities and the country. Cambodian coastal waters are considered among the richest areas in biodiversity resources, including significant aquatic resources and marine endangered species, such as green turtles, dolphins, sharks, coral reefs and sea-grasses, mangroves, groupers, shrimps, tortoises (endangered and rare species) and dugongs (UNEP, 2005).



Map 2.1: Coastal provinces of Cambodia

2.1.1 Mangrove forest

Cambodia has about 85,100 hectares of mangroves (Bann, 2003) are situated along the Gulf of Thailand. However, according to FiA figure, (2010), mangrove distribution remains around 78,405 hectares, approximately 8 percent of mangrove lost over the past nearly 10 years.



Map 2.2: Location of changes in mangrove distribution in Cambodia from 1997-2002

Source: MoE, 2007

Table 2.1 Distribution of mangroves of four coastal provinces

No	Province	Mangrove (ha)
1	Kampot	1,900
2	Kep	1,005
3	Sihanouk Ville	13,500
4	Koh Kong	62,000
Total		78,405

Source: FiA, 2010

Table 2.2 Areas of mangrove currently under different forms of land use designation and management

Parks and protected areas (conservation) non-extractive use	13,558ha
Areas estimated as currently under sustainable management	8,820ha
Area currently under management regulated in laws and regulations	13,558ha

Source: Modified from UNEP, 2008

2.1.2 Importance of mangrove forests

Mangrove forests play a significant role in the survival of some fish species and other marine organisms and serving as spawning grounds or nursery grounds for a wide range of commercially significant fish species. Therefore, overexploitation of mangrove can adversely affect the fisheries. As a result, local people's livelihoods dependent on the collection of mangrove resources will be affected (MoE, 2002). According to Bann, (1997) over 50 mangrove species have been found in Asia. Of over 50 mangrove species, 37 species are present in Cambodia. The most dominant species are of the family *Rhizophaceae* (species *Mucronata* and *Apiculata*); family *Combretaceae* with genera *Lumnitora*; and, family *Avicenniaceae* with genera *Avicennia*.

Mangrove wetlands are home to many rare animals and plants, but also have wider ecological and economic importance, and provide numerous services to humans. Mangroves prevent coastal erosion, and act as a natural barrier against typhoons, cyclones, hurricanes, and tsunamis, helping to minimize damage done to properties and lives. Mangrove tree species that inhabit lower tidal zones can block or buffer wave action with their stems, which can measure 30m high and several meters circumference. The trees both shield the land from wind and trap sediment in their roots, maintaining a shallow slope on the seabed that absorbs the energy of tidal surges. Mangrove forests store and process huge amounts of organic matter, dissolved nutrients, pesticides and other pollutants that are dumped into them by human activities, and by absorbing excess nitrates and phosphates prevent the contamination of coastal waters. In so doing, they play a vital role in protecting coral reefs and sea grasses from siltation and eutrophication. Mangroves also function as a sink for atmospheric carbon dioxide, a major contributor to global warming (EJF, 2006).

2.1.3 Threats to mangrove forests in Cambodia

Mangrove forests in Cambodia are under increasing threats from several main anthropogenic and natural activities (Nasuchon, 2009):

1. Coastal aquaculture: Mangrove forests have been cleared for coastal aquaculture development. 1,438.8 hectares of mangrove areas are being proposed for aquaculture production and 1,079 hectares have been selected for fish farming in Kampot Province.
2. Salt pans: Mangrove areas have been cut down for salt pan production.
3. Climate Change issues such as sea level rise, severe raining and storms is threatening coastal ecosystem and the livelihoods of local coastal communities
4. Inappropriate development activities such as sand mining and sea port may speed up the impacts on mangroves (IUCN, 2012)
5. Unsustainable collection of coastal aquatic resources such as *Periglypta sp.* affects mangrove roots (IUCN, 2013, unpublished report)
6. Other uses: urbanization, coastal development and pollution caused by oil spills (MoE, 2002) and land reclamation for agricultural and market purposes (EB-MFF-CAM, 2013)

2.2.1 Seagrass beds

Stretches of shallow, protected coastal waters often provides habitats for seagrasses. The seagrass beds provide cover for juvenile fish, and perform nursery functions for many different fish species. In addition to providing nursery areas, shelters and feeding sites for a range number of invertebrates and fish, many of which are of significant economic values, seagrass beds are important feeding areas for endangered vertebrates such as the dugongs and marine turtles. Furthermore a significant proportion of the nutrient produced by seagrass beds can be transferred to adjacent ecosystems such as coral reefs (MoE, 2005).

Seagrass in Cambodia can be divided into two types; extensive seagrass meadows along the mainland and paths of seagrasses interlinked with coral reefs around islands. Seagrass beds in Kampot province of Cambodia is the largest in Southeast Asia. Seagrass beds are vulnerable to

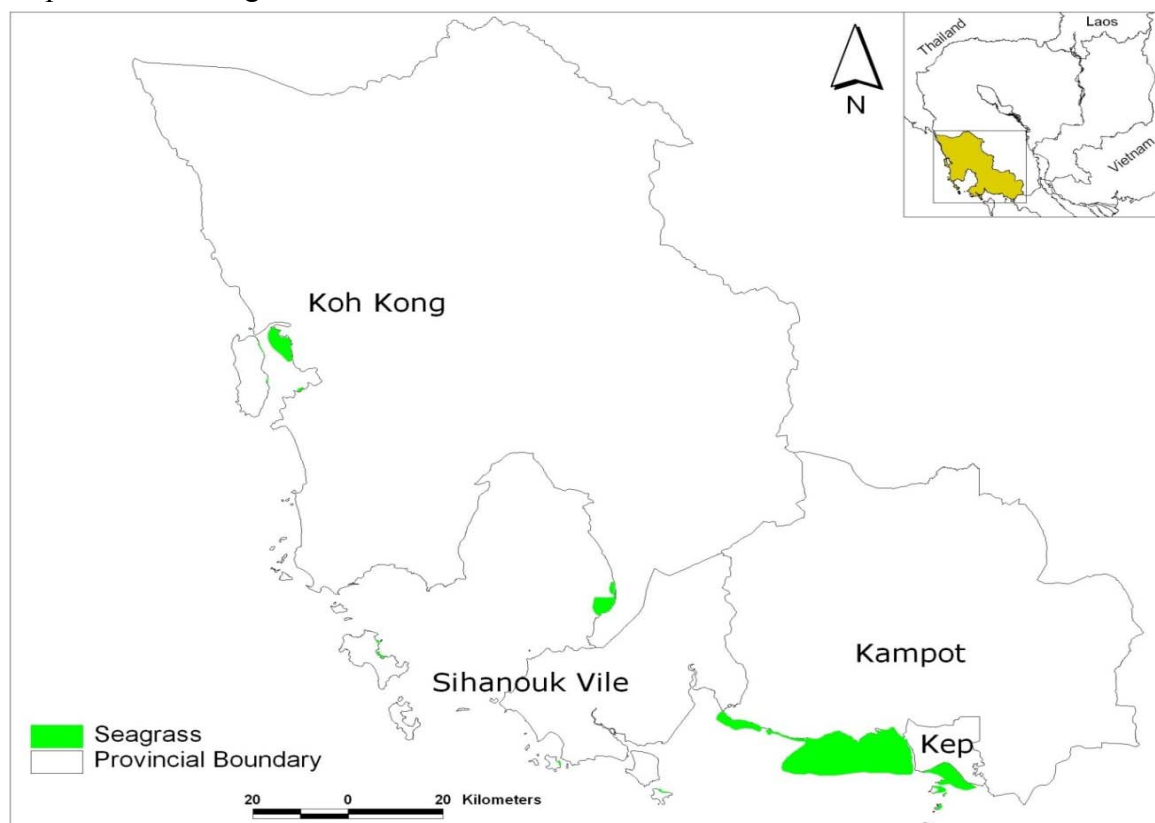
impacts from two main sources; degradation of water quality and destructive fishing practices such as encroachment of push nets and trawling in the seagrass beds. The change in water quality that affect the seagrasses is accumulation of siltation due to logging, rising use of fertilizers and pesticides in the coastal agricultural areas and discharge of domestic and industrial wastewater (MoE, 2005); increased water turbidity which reduces the quantity of sunlight reaching seagrass plants, diminishing the photosynthetic capacity of the plants (UNEP, 2008). The most extensive seagrass beds are found in Kampot Bay of Kampot province and followed by Koh Kong province.

Table 2.3 Distribution and management status of seagrass beds of four coastal provinces

No	Province	Seagrass area (ha)	Area under management (ha)	Location of area under management
1	Kampot	25,240	1,500	Chang Houn-Trapeang Ropov
2	Kep	3,095	731	Kep
3	Sihanouk Ville	1,486*	600	Keo Phos
4	Koh Kong	3,993	1,000	Chroy Bros
Total		33,814	3,831	

Source: DFC, 2013

* There are about 1,486 hectares of seagrass beds situated in Preah Sihanouk Ville (Vibol. O, pers. comm., 2012). The total figure is consistent to 33.814 hectares of seagrass beds outlined in UNEP, 2007. At present, 3,831 hectares, accounting for approximately 11 percent of total seagrass beds are under management. As indicated in the Strategic Planning Framework for Fisheries: 2010-2019, 9,000 hectares, representing around 27 percent of total seagrass beds will be put under management in 2019.



Map 2.3: Location of seagrass distribution

Source: MoE, 2007

Table 2.4 Prioritization of the threats to seagrass beds in Cambodia

Threats	Rank
Destructive fishing such as push net, trawlers	1
Over-fishing	2
Waste water effluent	3
Sedimentation from coastal development	4
Coastal construction	5
Nutrients	6

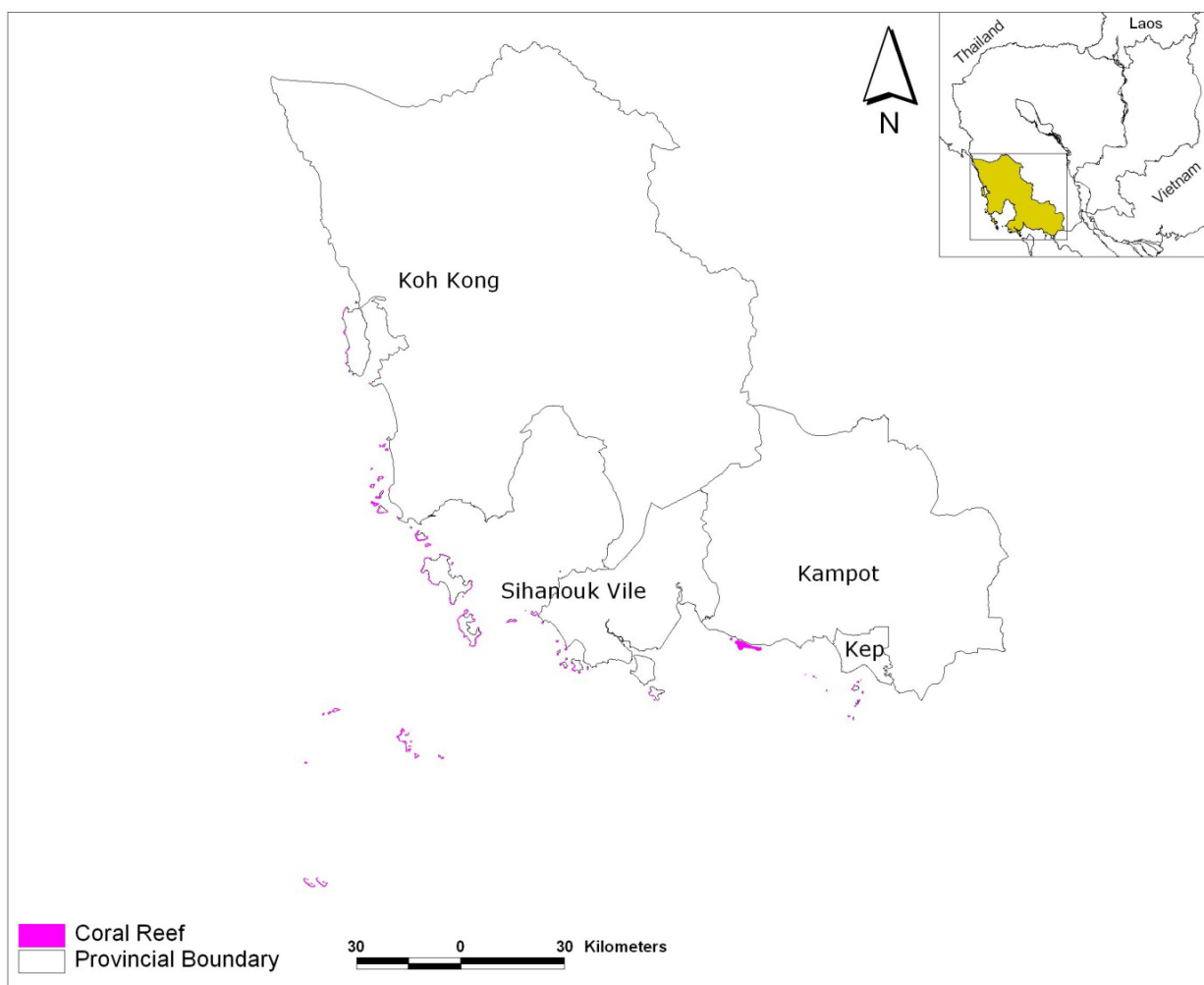
Source: UNEP, 2008

2.3.1 Coral reefs

Coral reefs are vitally important coastal ecosystems, providing local communities with a range of valuable social and economic goods and services. In addition, many reports, some relying largely on anecdotal evidence, have claimed that intact and healthy coral reefs shielded coastal communities from the worst of the tsunamis wrath (EJF, 2006)

Around 70 coral species are found in Cambodian waters. The coral habitat is home to many different species of fish. The coral reefs surveys were conducted in some coastal water during Phase 2 of the Environmental Management in the Coastal Zone project and additional work has been carried out by Fisheries Administration (FiA). Coral checks have been made annually by the FiA funded by UNEP.

There is limited available information on the distribution of coral reefs in Cambodia. A number of Cambodia's offshore islands are known to contain substantial areas of coral reefs but little is known of the diversity of plants and animal species in these areas. A coastal resource profile documented by DANIDA coastal zone management project has provided information of the location and extent of the coral in the near shore of the Cambodia's coast. Due to their physical structure, coral reefs provide niches for a wide variety of invertebrates and fishes, resulting in a significantly higher species abundance and diversity than would occur in the open water (MoE, 1999). Extraction and collection of coral is commonly practicing by local people in Cambodia.



Map 2.4: Location of coral reef distribution in Cambodia

Source: MoE, 2007

Table 2.5 Distribution and management status of coral reefs of four coastal provinces

No	Province	Coral reefs (ha)	Area under management (ha)	Location of area under management	Type of Management
1	Kampot	953	-	-	-
2	Kep	52.5	-	-	-
3	Sihanouk Ville	1,198	468*	Koh Rong and Koh Rong Samleum	MFMA
4	Koh Kong	602	529**		MFMA
Total		2,805.5			

* National Report on Fisheries, 2012

** Location being studied and proposed as MFMA at Koh Sdach archipelago

Source: DFC, 2013

2.3.2 Threats to coral reefs in Cambodia

Threats identified to these reefs are dynamite fishing, near-shore trawling, and to a lesser extent, harvesting for ornaments and curios. Currently, the only marine protected area is the Ream National Park, which encompasses several near-shore islands. A formal management plan has yet to be formulated for this Park.

Table 2.6 Prioritization of the threats to coral reefs in Cambodia

Types of threats	Threats	Rank
Direct threats	Over-fishing	1
	Destructive fishing	2
	Sedimentation	5
	Pollution	4
	Coral bleaching	8
Indirect threats	Unsustainable fisheries and aquaculture (Seaweed culture)	3
	Coastal development	6
	Unsustainable tourism	9
	Deforestation on upland areas	7

Source: UNEP, 2008 and modified by EB-MFF-CAM, 2013

2.4 Economic values of main coastal resources in Cambodia

According to UNEP (2007), the estimated annual net economic values of seagrasses in Cambodia are 1,186 USD/ha/yr, while the mangrove forest is 882.35 USD/ha/year. The economic values of coral reefs are not available. The economic values below do not include those of ecosystems.

Table 2.7 Economic values of significant coastal resources in Cambodia

Types of ecosystems	Estimated annual net economic values (USD/ha/yr)	Estimated existing areas in Cambodia (ha)	Total estimated net economic values (Million in USD/yr)
Mangrove forests	882.35	78,405	≈69.18
Coral reefs	N/A	2,805.5	N/A
Seagrasses	1,186	33,814	≈40.10

Source: UNEP, 2007

2.5 Threats to coastal and marine ecosystems

As indicated in report on state of coastal environment in Cambodia written by MoE, (2005), increased population, lack of awareness, global trading, natural and man-made disasters, climate change, overexploitation of biological resources, wildlife trade, pollution, modern agriculture, and invasive species have led to losses in coastal and marine ecosystems.

In addition, it has been reported that the following have been threats to coastal and marine ecosystems:

Conversion of coastal land for agriculture

The increasing conversion of coastal areas for agricultural production has affected the biodiversity resources and has been seen as a key threat toward overused land in terms of land use suitability. Agricultural land uses include; paddy fields, crop fields, orchards, plantation, and village garden crops are characterized. Furthermore agricultural practices including the use of pesticide and fertilizer can also lead to the degradation of coastal biodiversity resources as a result of runoff.

Over exploitation of fisheries

The increasing use of large trawler boats operating in shallow water and the rise in modern fishing equipment such as motorized push nets all contribute to a destruction of marine habitats that are home to small fish and other marine species, thereby causing an overall decline in fish productions. Some fishing boats use destructive fishing methods (for e.g. explosive and high-powered lights) for marine harvesting, contributing not only to a decline in marine resources but also to a destruction of marine habitats.

Urban development

There are further pressures caused by urbanization and industrialization along the coastline. such as Cement factories located in Kampot, and breweries, handicraft manufacturing, petrol storage, local and international ports, hotels, and restaurants being increasingly developed in Sihanoukville.

Other types of ongoing activities that could damage coastal water quality, ecosystems, and fishery habitats include dredging, untreated domestic and municipal waste, and related heavy construction work associated with port and harbor improvement, maintenance and building. The impact of these activities has led to an increase in the fragility of the physical coastal ecosystem, oligotrophic, coastal water pollution, eutrophication (due to high concentration of Nitrogen and Phosphate and oily-water), public health deterioration, declining of eco-tourist areas, near shore fishery product decline¹.

Implementation of ICM policy

The absence of clear mandates for incorporating environmental inputs into planning and zoning activities, as well as the absence of integrated management plans, regional plans, research, and monitoring programs, are the main issues which need to be addressed for effective management of urbanization and industrialization along the coastal zones.

Sand mining and dredging²

One of the key drivers of coastal habitat degradation is the rapid increase in the rate of sand dredging in the Koh Kong and Kampot coastal zones. Despite a total ban imposed in 2009 on marine dredging for export, operations have continued across a wide area.

Destruction and degradation of coastal habitats²

Coastal habitats and fisheries resources of Cambodia are being degraded. The main drivers include: coastal population growth, destruction and degradation of mangrove forests, coral and seagrass habitats, illegal and destructive fishing methods and unchecked fishing operations (Cambodia and foreign vessels).

1. IUCN, 2012, Cambodia Coastal Situational Analysis, Building Resilience to Climate Change Impacts- Coastal Southeast Asia

² Draft Proposal for Kampot Coastal Land Use Zoning, 2012

CHAPTER 3

CAMBODIA POLICY ON MANGROVES AND COASTAL ECOSYSTEM MANAGEMENT

Cambodia has laws, policies, strategies, action plans and Sarachor (circular) on the development of coastal areas. Ministry of Environment and Ministry of Agriculture, Forestry and Fisheries play a core role in managing, protecting and conserving coastal ecosystems, including mangroves, seagrasses and developing coastal areas. National Committee for Management and Development of Cambodian Coastal Areas established by the Royal Decree dated on 16 February 2012 with its composition from various ministries and institutions related to coastal areas plays a significant role integrating sectoral approaches for coordination, management and development of coastal areas in Cambodia to ensure sustainability and a sense of responsibility of the management and protection of coastal biodiversity resources and improvement of local people's livelihoods.

3.1 National laws and legal instruments

The following are some of the key laws and regulations relevant to coastal area management:

Royal Decree on Creation and Designation of 23 Protected Areas (01 November 1993)

- Address the process of national resources management in line with United Nations List on National Parks and Protected Areas.

Law on Environmental Protection and Natural Resources Management (24 December 1996)

- Protect and promote environmental quality and people's health by curbing, reducing and managing pollutions
- Conduct environmental impact assessment before release of Government's decision on proposed projects
- Ensure conservation, development, management and sustainable and suitable uses of the natural resources of the Kingdom of Cambodia
- Suppress all activities harmful to the environment

Law on Fisheries (21 May 2006)

- Establish a framework to manage, protect, conserve, use, exploit and restore the flooded forests and develop fisheries sector to ensure the long-term sustainability of environmental, social and economic benefits.

Law on Protected Areas (15 February 2008)

- Manage and conserve in an effective way biodiversity resources and sustainably use the natural resources in protected areas
- Implement convention, protocols, and regional and national agreement on protection of ecosystems and biodiversity
- Define responsibilities and involvement of local communities
- Define standards and tools for the management of protected areas

Sub Decree on Water Pollution Control (06 April 1999)

- Define the control of water pollutions to prevent and reduce water pollution in public water places to protect the human health and biodiversity conservation.

Sub-Decree on Solid Waste Management (27 April 1999)

- This sub-decree is intended to define technical and safe control of solid waste to ensure the protection of public health, environmental quality and biodiversity conservation.

Sub-Decree on Environmental Impact Assessment (11 August 1999)

- Conduct environmental impact assessment on private and public projects and activities and monitored and evaluated by the Ministry of Environment before submission to the Government for approval
- Define types and scopes of projects for EIA
- Promote public participation in EIA processes

Sub Decree on the Establishment of the National Climate Change Committee (24 April 2006)

- Prepare, coordinate and show the implementation of the Government's policies, strategies, laws, plans and programs to address climate change in terms of issues in the country
- Share the protection of environment and natural resources
- Project and mitigate climate change which may affect human functioning

Sub Decree on Community Fisheries Management (March 2007)

- Manage the inland and coastal fisheries areas
- Manage fisheries resources in a sustainable manner and ensure the equitable sharing of benefits from fisheries resources for Khmer citizens;
- Increase Khmer citizen's understanding and recognition of the benefits and importance of fisheries resources through direct participation in managing, using and protecting fisheries resources;
- Provide a legal framework that makes it easy for Khmer citizens living in local communities to establish community fisheries;
- Improve the standard of living of Khmer citizens in order to contribute to poverty reduction

Sarachor (Circular) on the Development of Coastal Areas of Kingdom of Cambodia (03 February 2012)

This Sarachor aims to guide ministries, institutions concerned and sub-national administration to manage, use, maintain, protect and develop coastal areas in the Kingdom of Cambodia including terrestrial domains, islands and waters with plans to manage and develop coastal areas in a right, effective and viable way .

3.2 Policies, strategies and national plans for coastal zone management

National Strategic Development Plan (2009-2013)

This strategic plan reviews all existing regulations, identification of problems, key stakeholders and detailed programs to ensure the improvement and sustainable management of the environment for the benefits of health, society and the environment.

Coastal Environmental Management Action Plan (2007-2011)

This action plan indicates the concepts of integrated coastal zone management process in developing plans and joint decisions on multi-disciplinary activities in terms of forests, fisheries, hard and soft waste as well as coastal land use zoning.

Strategic National Action Plan for Disaster Risk Reduction (2008-2013)

This strategic national plan covers 6 main themes: (1). Ensure that Disaster Risk Reduction is regional and national priority, (2). Strengthen communities and sub-national stakeholders based on the risk management, (3). Define risk assessment and monitoring and promote warning system media, (4). Apply knowledge and education to ensure the safety and betterment, (5). Mainstream DRR into programs and policies of relevant ministries and (6). Strengthen the risk prevention in an effective way.

Cambodia Climate Change Strategic Plan (2013-2023)

This strategic plan aims to mainstream climate into national, sub-national and sector level planning to achieve climate resilient and green development; reduce vulnerability to climate change impacts of critical systems and most vulnerable groups; shift towards a green development path by promoting low-carbon development and technologies; enhance resource mobilization from international climate finance, public-private partnerships and national budgetary allocation to support climate change responses; improve equity in accessing opportunities for climate change responses and strengthen education, research and capacity development in providing climate services

Strategic Planning Framework for Fisheries (2010-2019)

This strategic plan framework is intended to support to achieve the Cambodia's Millennium Development Goal, National Strategic Plans and Rectangular Strategy of the Government to protect and conserve critically endangered and vulnerable species and prevent the introduction of invasive alien species into Cambodia.

National Action Plan for Coral Reef and Seagrass Management in Cambodia (2006-2015)

The goal of this action plan is to protect and manage coral reef and seagrasses to ensure sustainable fisheries resource utilization and development for the reduction of poverty and improve quality of life for all Cambodians.

Draft Sustainable Development Strategic Plan of Southeast Asia for Cambodia to protect coastal environment for 2012-2016 (October 2012)

This strategic plan aims to effectively implement Government's policies and strategies to protect the environment to promote public health, prevent erosion, ensure the effectiveness of natural resources management, protect disaster risks and climate change and reduce and eliminate coastal environment pollutions.

3.3 National committee for coastal and marine zone management

National Committee for Management and Development of Cambodian Coastal Areas (06 Feb 2012)

- Prepare policies, strategic planning, master plan, action plans, programs and projects related to the management and development of coastal areas;
- Monitor, prevent and take necessary measures to stem all inactive actions affecting the environment and natural resources at coastal areas;
- Monitor and evaluate all development projects and project implementation at coastal areas to ensure the conformity with Government guidelines for the development of coastal areas;
- Facilitate coastal zone management;
- Protect the environment and natural resources in the coastal zones to improve the living conditions for coastal population through the sustainable use and development of the coastal zone;
- Coordinate between regional and national institutions and donors on coastal issues;
- Monitor and advise the Royal Government for the purpose of harmonizing policies, plans and legal framework concerning coastal zone management with national development priorities, conventions and international laws on coastal zone management;
- Prepare regular annual reports on its activities and outcomes and provide recommendations to the Royal Government;
- Provide advice and guidance on coastal zone management
- Coordinate the management and protection of natural and coastal environmental resources to improve the local people's livelihoods through the sustainable uses and development of coastal zones.

Chapter 4

PRIORITY STRATEGIES AND ACTION PLANS FOR MANGROVES FOR THE FUTURE IN CAMBODIA

The purpose of the C-NSAP is to protect, conserve and manage both ecological and socio-economic system to ensure the long-term sustainability of coastal ecosystems of mangroves as a flagship species, seagrass beds, coral reefs and other coastal resources and benefits of the coastal resources-dependent dwellers in Cambodia.

It lays out the priority strategies and action plans for sustaining and developing actions to protect, manage, conserve and utilize the coastal biodiversity resources in a sustainable manner and improve local people's livelihoods. The strategy provides a framework for action at all levels that will be undertaken to promote the conservation of coastal biodiversity resources and the sustainable utilization.

4.1 Priority Strategies and Action Plans for MFF in Cambodia

Given the real situation Cambodia has experienced and people's necessary demands, coastal biodiversity resources need to be well protected and managed at any cost to ensure the coastal ecosystems are healthy and those resources-dependent local people's livelihoods are improved, Executive Board for Mangroves for the Future initiative of Cambodia recognizes all 13 strategies as outlined in the C-NSAP for the period of 2014-2016 significantly important to the context of coastal resources management and protection. However, the first five of the following 13 strategies pointed out in the C-NSAP have been selected as the top priorities for MFF intervention for the period of 3 years 2014-2016. EB-MFF-CAM is perceived that in order to protect and manage coastal ecosystems in a sustainable way, while raising local people's living conditions, it focuses on:

- Protect and manage coastal ecosystems in a sustainable way
- Diversify local people's livelihoods
- Bring best practices and lessons learned from the grassroots level to the national level to prepare policies for development
- Build coastal community resilience to climate change and natural disasters through practical experiences, local knowledge and ecosystems-based adaptation (mangrove replanting and sea grass and mangrove restoration at degraded areas to increase natural resilience to climate change.
- Recognition of knowledge base as mechanisms to engage local communities in coastal ecosystems protection and restoration and help reduce their vulnerability to hazards by supporting livelihoods.

Many development activities have been taking place at the coastal zones. Therefore, balance between development and conservation is taken into consideration to ensure the local livelihoods and coastal ecosystems are secured. The socio-economic system depends on the many functions and products of ecological systems. Ecological systems have abundant living and non-living resources, although their capacity to provide fish, timber, coral reef, seagrasses, clean water, and other goods and services used for socio-economic development is limited.

Climate change is happening and intensifying. Climate change symptoms in Cambodia include sea level rise, abnormal fluctuations in low and high tides, storm, hot temperatures and sea-wave surges. Cambodia acknowledges that ecosystem degradation and losses have resulted in serious impacts on human being and availability of goods and services to local communities and economic opportunities. Healthy ecosystems both reduce vulnerability to natural risks by

supporting and diversifying local people's livelihoods and serving as natural physical sponges and shields to reduce the impacts from hazard events.

There has not yet been adequate integration at the national and sub-national levels into integrated coastal management (in terms of use and responsibility for management and protection of the natural coastal area resources) as well as absence of clear mandates for incorporating environmental inputs into zoning and lack of capacity for ICM. The combination of inter-ministries and other stakeholders as well as private sector engagement in shared thinking, planning and responsibility and implementation to achieve sustainable management and protection of coastal area resources.

The following are five top priority strategies for MFF in Cambodia for the period of 3 years

Strategy 1: Building knowledge base for coastal resources management (PoW1)

Sharing knowledge on the current status on fisheries and aquatic resources management and coastal and marine ecosystems plays an essential part of any knowledge management strategy:

Action plans:

- 1.1** Publish results of research (newsletters or information bulletins) on coastal and marine biodiversity resources made available in the Khmer version to be shared to all stakeholders including local communities;
- 1.2** Organize national annual or semi-annual forum or workshop to bring together multi-coastal stakeholders and MFF members to update projects (strengths and weaknesses) and share lessons learned and best practices on coastal ecosystem management and protection;
- 1.3** Build learning and information sharing center: a mechanism to share to MFF members and other multi stakeholders about all MFF's project activities-related information such as lessons learned and best practices regionally, nationally and locally;
- 1.4** Establish a separate country homepage/website where information on mangroves and other coastal ecosystems such as seagrass beds and coral reefs can be accessed and updated, achievements of MFF-funded project implementation on the ground, best practices on sustainable coastal ecosystem protection and management;
- 1.5** Strengthen regular communications, learning and information-sharing mechanisms between coastal managers and practitioners of coastal management projects within Cambodia, local authorities and communities and disseminate knowledge and experiences with other MFF countries through the regional knowledge sharing platform;
- 1.6** Develop relations both inside and outside the country such as students and researchers to learn and share knowledge and experiences and other culture with local people living within mangroves areas;
- 1.7** Establish community-led action research on coastal resources.

Strategy 2: Promoting environmentally sustainable livelihoods (PoW8)

Action plans:

- 2.1** Build capacity of local NGOs and community groups for ongoing environmentally-friendly livelihood initiatives at the community level e.g. ecotourism, mangroves product processing, coral reef snorkeling and handicrafts;

- 2.2 Support activities that provide livelihood alternatives to destructive practices (trainings on culture techniques on sustainable aquaculture and integrated farming system, access to credits with the lowest interest rate to do small-scale businesses to promote welfare of local people and reduce immigration);
- 2.3 Increase the level of awareness amongst fisher-folks, school children, tourism operators and other communities of the impacts of the losses of the biodiversity resources and climate change to local livelihoods;
- 2.4 Promote Payments for Ecosystem Services (PES) scheme: contribution from tourists to the conservation and management of the coastal resources at the grassroots level and as a source of income for mangrove restoration and conservation
 - Ecosystem services (wildlife, dolphin, mangroves sightseeing and other natural views)
 - Collection of aquatic resources (crabs, shrimps, fish and other aquatic animals)
 - Collection of non-timber forest products (medicinal plants, construction timbers)
 - Scientific research (plants, animals and other biodiversity resources);
- 2.5 Promote cooperation from private sectors in the conservation and protection of the natural resources (ecotourism sector operation);
- 2.6 Apply nest protection scheme as economic incentives to local community to get involved in environmentally-friendly conservation and use activities;
- 2.7 Promote renewable energy and energy efficiency to reduce GHG emissions and the destruction of mangrove forests
 - Renewable energy
 - Energy efficiency
 - Efficient cook stove
 - Biogas.

Strategy 3: Building community resilience to climate change and natural disasters (PoW9)

Action plans:

- 3.1 Restore mangrove habitat using assisted planting and natural restoration as the natural barriers and infrastructure against sea waves, storms, coastal erosion;
- 3.2 Build awareness and sensitize the communities on the importance of natural ecosystems in adaptation and coastal resilience;
- 3.3 Conduct assessment of effectiveness through on-the-ground projects the socio-economic implications of CC impacts;
- 3.4 Conduct assessment of climate change mitigation and adaption measures to prevent their impacts on the natural resources and identification of response measures to mitigate impacts of the climate change on the coastal resources;
- 3.5 Promote small-scale credit access for local communities for climate change response and adaptation strategies;
- 3.6 Identify environmentally-friendly technological action to promote low-carbon development and reduce carbon emissions into the atmosphere (e.g. improving energy efficiency, use of renewable energy);

- 3.7 Promote public access to early warning systems, to information on climate change and natural disasters through the means of hotline radio, television, newsletters, web technologies, and reports;
- 3.8 Produce disaster risk maps and local use of natural coastal resources;
- 3.9 Share best practices about adaptation to local communities (climate-resistant seeds, early and high yield rice seeds).

Strategy 4 : Ecologically and socio-economically-sound Rehabilitation (PoW2)

Action Plans

- 4.1 Plant with existing patches of mangrove forests and restoration of degraded mangrove forests as the natural barriers and infrastructure against sea waves, tidal storms and coastal erosion;
- 4.2 Plant domestic plants and increase vegetation coverage to stabilize the coastal soil erosion;
- 4.3 Establish mangrove seedling nurseries;
- 4.4 Identify potential areas for mangrove restoration and replanting;
- 4.5 Set up artificial reefs into seagrass beds;
- 4.6 Expand conservation and protection areas for those endangered species, e.g. dugongs, dolphins.

Strategy 5: National integrated coastal management programs (PoW11) to prevent biological and commercial extinction and optimize the benefits derived from coastal and marine resources

Action plans:

- 5.1 Undertake capacity building sessions for coastal stakeholders and field practitioners;
- 5.2 Assess national institutional mechanisms and programs for integrated coastal management;
- 5.3 Increase trans-boundary partnership and collaboration opportunities between neighboring countries to conserve and protect endangered marine species, e.g. Marine Irrawaddy Dolphin;
- 5.4 Promote Public-Private Partnership principle in coastal ecosystem protection and investment;
- 5.5 Establish joint conservation and protection zones between neighboring countries.

In the long-term period, the following eight more strategies outlined in this plan will be implemented in response to national policies and strategic plans and long-term demands of Cambodian people.

Strategy 6: Ecosystem valuations (PoW4)

Action Plans:

- 6.1 Carry out economic valuation of PKWS mangroves in Koh Kong;
- 6.2 Conduct economic valuation of Kampot seagrass beds.

Strategy 7: Building capacity of coastal managers (PoW7)

Action plans:

- 7.1 Establish coastal management resource point/library/clearing house/online forum;
- 7.2 Organize " Training of Trainers (TOT)" course to provide new trainers background information, skills and practical experiences on mangrove and seagrass health monitoring and management (Wetlands University Networks);
- 7.3 Conduct assessment needs and provide training courses, ranging from national to local levels (coastal managers to local coastal communities);
- 7.4 Carry out site-based trainings to further familiarize views of marine ecosystems and ecosystem-based management, precautionary approach (sharing their local knowledge: destruction, restoration and protection);
- 7.5 Develop methodologies, criteria and indicators for sustainable management of coastal and marine ecosystems;
- 7.6 Build capacity on techniques of GPS and GIS applications and remote sensing and capacity for regular coastal resource surveys.

Strategy 8: Sustainable financing mechanisms (PoW10)

Action plans:

- 8.1 Design and develop innovative models for sustainable financing at protected area management, coastal ecosystem rehabilitation, and community livelihood activities;
- 8.2 Conduct pilot study on payments for ecosystem services schemes for selected coastal ecosystems and management programmes, based on private-public community partnerships;
- 8.3 Improve and promote the conservation and protection of mangrove forests and seagrasses for carbon credit opportunities through REDD implementation.

Strategy 9: Marine and coastal protected areas (PoW13)

Action plans:

- 9.1 Carry out coastal mangrove mapping and sea-grass beds zonings in coastal provinces;
- 9.2 Conduct video shorelines to monitor changes in mangrove distribution;

- 9.3** Collect data on seagrass beds for designation of potential areas for other activities to produce a map on distribution of seagrass beds. Seagrass beds play a significant role in increasing natural fisheries stocks and sequestering carbon.

Strategy 10: Environmentally sound business practices (PoW15)

Action plans:

- 10.1** Develop models for coastal conservation by partnerships between the government institutions, NGOs and local communities and the private sectors;
- 10.2** Promote private sector engagement in conservation and protection of coastal ecosystems and establishment of environmentally sustainable business practices.

Strategy 11: Climate Change: (Cross-cutting issue)

Protection and conservation of the unique bio-diversity and eco-system that Cambodia is blessed with and the sustainable use of this natural resource for the benefit of all Cambodians and for the response to climate change is a high priority of the Royal Government.

Action plans:

- 11.1** Conduct education program on the importance of coastal ecosystems of mangroves and seagrasses in carbon sequestration and climate change mitigation and ecosystems-based DRR. Mangrove forests support a wide range of ecological and economic functions by providing people with different economically valuable products and services;
- 11.2** Recognize the potential of mangroves and seagrasses for REDD implementation opportunities to reduce emissions from deforestation and degradation with its potential to provide low-cost options to mitigate global greenhouse gases emissions and lead to the sustainable management and protection of mangroves and other coastal resources.

Strategy 12: Mainstreaming Gender (Cross-cutting issue)

MFF recognizes that gender equity and equality and women's empowerment are part of successful and sustainable coastal resources protection and development. The Royal Government considers women as the backbone of the society and the economy by promoting women's participation in decision making in the public sector at all levels from policy advocacy at the national level to the local level³.

Action plans:

- 12.1** Promote gender equity and equality and women's empowerment through different levels of active and full participation on the part of both men and women in identifying and addressing priority risks and other environmental and socio-economical concerns in coastal and marine areas and to enable them to reap equal benefits from their participation of coastal biodiversity management and protection;
- 12.2** Mainstream gender in all aspects of fisheries management, development, conservation and use;
- 12.3** Reduce gender imbalances by enhancing more access to rights, responsibilities and opportunities to both men and women and recognizing their different roles and needs to maintain their livelihood options and safety nets;

³ Government of Cambodia's National Strategic Development Plan Update 2009-2013 for growth, employment, equity and efficiency to reach Cambodia Millennium Development Goal

- 12.4 Conduct education and awareness programs on gender dimensions in coastal resources management;
- 12.5 Recognize the potential multiple roles of gender (needs and aspiration of women) in the process of planning, decision making, implementation, monitoring and evaluation in the management and protection of marine species and habitats.

Strategy 13: Communications (Cross-cutting issue)

Action plans:

- 13.1 Strengthen existing channels for promoting awareness of the importance of coastal and marine resources and climate change to government civil servants, teachers, school children, journalists, extension services, religious leaders and community elders;
- 13.2 Promote publications of knowledge and information products through several mechanisms such as printed materials of bulletin, newsletters, meetings and workshops, TV/Radio programs, special radio channel of coastal communities, MFF regional Newsletter and websites/blogs, face-book and YouTube.

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Annex

Unofficial translation

Ministry of Environment

N: 381 s.s.r. b.s.th

Kingdom of Cambodia

Nation, Religion and King

Phnom Penh, 12 October 2012

Decision

On

Establishment of Executive Board for Mangroves for the Future Initiative of Cambodia (EB-MFF-CAM)

Senior Minister, Minister of Environment

- Having seen the Royal Kram n.s/r.k.m/0196/21 dated on 24 January 1996 promulgating the law on the establishment of the Ministry of Environment
- Having seen the Royal Kram n.s/r.k.m/1296/36 dated on 24 December 1996 promulgating the law on the protection and management of the natural resources
- Having seen the sub-decree 57 or.n.kr-b.k dated on 25 September 1997 on the organization and functioning of the Ministry of Environment
- Referring to the first meeting on 15 June 2012
- Referring to the minutes of the first meeting on 18 June 2012
- As the requirements of Mangroves for the Future in Cambodia

Hereby decides

Article 1

To establish the Executive Board for Mangroves for the Future initiative of Cambodia (EB-MFF-CAM) to coordinate and steer the Mangroves for the Future Initiative.

Unofficial translation

Article 2

The Executive Board for Mangroves for the Future initiative of Cambodia is composed of:

No	Name	Position	EB-MFF-CAM Position
1	H.E Dr. Vann Monyneath	Deputy Director-General of Technical Affairs of MoE	Chair
2	Dr. Srey Sunleang	Director of Department of Wetlands and Coastal Zones of MoE	Deputy Chair
3	Mr. Ouk Vibol	Deputy Director of Department of Fisheries Conservation of FiA	Deputy Chair
4	Mr. Kong Kimsreng	Senior Programme Officer of IUCN	Executive Secretary
5	Mr. Ek Rotha	Deputy Director of Department of Planning Development of MoT	Member
6	Mr. Am Phyrum	Deputy Director of Department of Agricultural Land Resources Management of MAFF	Member
7	Mr. Path Sok	Deputy Director of Department of Land Cadastre Conservation of MLMUPC	Member
8	Mr. Im Sophanna	Deputy Chief of Office of MoWRaM	Member
9	Mr. Hoy Sereivathanak Reasy	Lecturer of Royal University of Phnom Penh	Member
10	Mr. Thay Somany	Coordinator for National Fisheries Resources-Based Livelihoods of UN-FAO	Member
11	Mr. Eam Dyna	Research Officer of World Fish Center	Member
12	Mr. Om Sovath	Executive Director of FACT	Member
13	Mr. Lou Vanny	MFF Coordinator of IUCN	Standby Secretary
14	Mr. Sreng Sophal	Office head of MoE	Standby Secretary

Unofficial translation

Article 3

The Executive Board for Mangroves for the Future initiative of Cambodia has roles and duties as follows:

- Serve as the national focal point for communications related to mangroves for the future;
- Advise and coordinate the implementation of MFF in Cambodia;
- Facilitate institutional and multi-stakeholder forums to foster improved dialogue on knowledge and experience sharing, local empowerment and governance, preparation of a strategic planning and decision-making between the different stakeholders;
- Participate in promoting harmonized monitoring and management of coastal ecosystems for sustainable local livelihoods and development;
- Review results of implementation of projects or programs achieved through MFF in Cambodia;
- Strengthen regular communication, learning and information-sharing between coastal managers and implementers of coastal management projects within Cambodia and disseminate knowledge and experiences with other MFF countries through the regional knowledge sharing platform;
- Support capacity-building at national and local levels through MFF;
- Facilitate linkages between MFF initiatives and existing coastal projects in Cambodia;
- Mobilize resources to implement the programmes of work under the MFF in Cambodia;
- Prepare and update work plans and budgets for the implementation of MFF in Cambodia;
- Manage national calls for proposals for MFF, and review and endorse projects to be submitted to RSC for final review and decision;
- Make decisions about the allocation of funding under the national small grants facility in Cambodia;
- Review and comment bi-annual progress reports on the implementation and progress of MFF in the country;
- Obtain different tasks and duties at the request of the chair

Article 4

The EB-MFF-CAM shall hold at least two meetings a year at the request of the chair. In the necessary cases, the chair can invite technical experts from other ministries and institutions to get involved in consultation on some issues related to the Mangroves for the Future Initiatives

In the daily work, the members of the EB-MFF-CAM shall communicate with other members and standby secretaries via email and other means of communications.

The EB-MFF-CAM is eligible to use seal of Technical General Department of the Ministry of Environment in the process of its work

In case that the chair is not present, the deputy of EB-MFF-CAM with the permission of the former can lead the meeting.

Unofficial translation

Article 5

The Executive Board for Mangroves for the Future initiative of Cambodia (EB-MFF-CAM) is located in the office of IUCN-Phnom Penh where direct communications can be made with the standby secretaries in administrative and financial work of the project.

Article 6

Relevant ministries-institutions, technical general department, general department of administration for conservation and protection of nature, cabinet, departments and units under the ministry of environment and yourself have roles and duties to effectively implement the decision from the date of its signature.

Senior Minister, Minister of Environment

H.E Dr. Mok Mareth

Doctor of Biology

CC

- Ministry of Land Management, Urban Planning and Construction
- Ministry of Water Resources and Meteorology
- Ministry of Tourism
- Fisheries Administration of Ministry of Agriculture, Forestry and Fisheries
- General Department of Agricultural Land Management of MAFF
- Royal University of Phnom Penh
- Relevant Departments/Units
- Itself
- Documentation



Mangroves for the Future
INVESTING IN COASTAL ECOSYSTEMS

About Mangroves for the Future

Mangroves for the Future (MFF) is a unique partner-led initiative to promote investment in coastal ecosystem conservation for sustainable development. It provides a collaborative platform among the many different agencies, sectors and countries who are addressing challenges to coastal ecosystem and livelihood issues, to work towards a common goal.

MFF builds on a history of coastal management interventions before and after the 2004 Indian Ocean tsunami, especially the call to continue the momentum and partnerships generated by the immediate post-tsunami response. It initially focused on the countries worst-affected by the tsunami; India, Indonesia, Maldives, Seychelles, Sri Lanka, and Thailand. MFF has expanded to include Bangladesh, Pakistan and Viet Nam. MFF will continue to reach out other countries of the region that face similar issues, with an overall aim to promote an integrated ocean wide approach to coastal zone management.

The initiative uses mangroves as a flagship ecosystem, but MFF is inclusive of all coastal ecosystems, including coral reefs, estuaries, lagoons, sandy beaches, sea grasses and wetlands. Its long-term management strategy is based on identified needs and priorities for long-term sustainable coastal ecosystem management. These priorities emerged from extensive consultations with over 200 individuals and 160 institutions involved in coastal management.

MFF seeks to achieve demonstrable results in influencing regional cooperation, national programme support, private sector engagement and community action. This will be achieved using a strategy of generating knowledge, empowering institutions and individuals to promote good governance in coastal ecosystem management.

Learn more at: www.mangrovesforthefuture.org

