



One Vision
One Identity
One Community

ASEAN Strategy on Sustainable Mangrove Ecosystem Management 2024-2030

The 27th Meeting of the ASEAN Senior Officials on Forestry (ASOF)
18th -19th July 2024, Bogor, West Java, Indonesia

The ASEAN coastal and mangrove



173,000 km
coastline

Richards and Friess, 2015



4.512.000 ha
mangrove

Richards and Friess, 2015



34% of the world's
mangrove

Richards and Friess, 2015



77 percent of the
region's total
population of 2.62
billion people lives
in the coastal areas

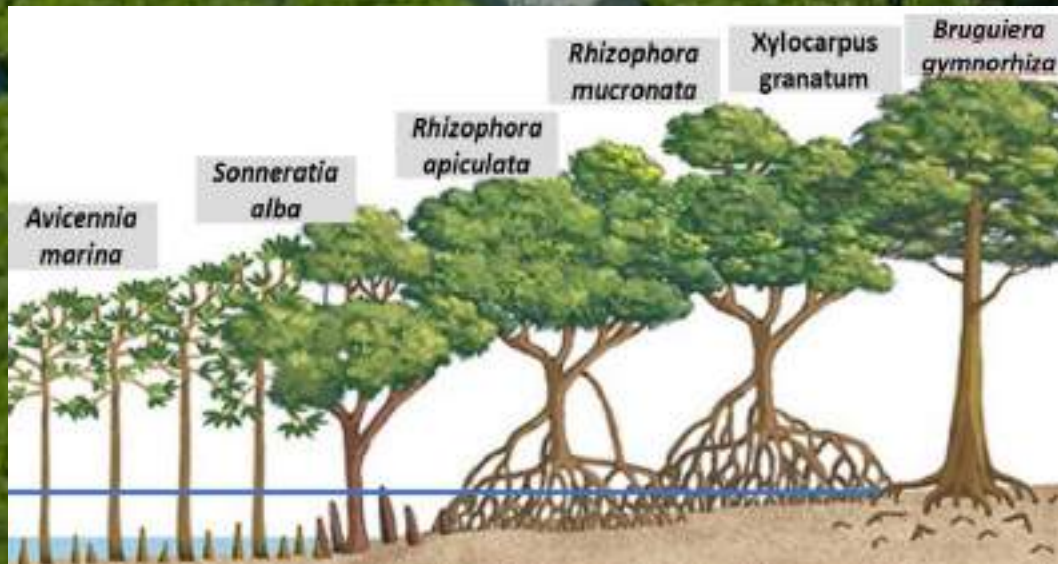
PEMSEA, 2015



The close relationship between
the mangroves, seagrass, coral
reefs, terrestrial, and marine
ecosystems, for the context of
biodiversity, climate, and
ecosystem restoration

PEMSEA, 2015

What is and why Mangroves?



Mangroves are coastal vegetation that has a distinctive morphology with a root system that can adapt to the coastal dynamics that occur in tidal areas with mud or sandy mud substrates



Coastal Protection



Water filtration



Climate change mitigation



Biodiversity



Fisheries



Livelihoods



Food Production



Tourism

The importance



more than 200
mangrove species



more than 120
species of fauna
associated



coastal abrasion
control



carbon stock capacity
4-5 higher than
terrestrial forest



as a nursing ground
and nutrient source
for fishery



embedded in the hearts,
culture, and daily lives of
the people

The mangrove ecosystem degradation



Country	Aquaculture	Rice	Oil palm	Mangrove forest	Urban	Other category
Indonesia	48.6	0.1	15.7	22.6	1.9	11.2
Myanmar	1.6	87.6	1.1	0.5	1.6	7.6
Malaysia	14.7	0.1	38.2	17.6	12.8	16.7
Thailand	10.8	5.6	40.0	5.1	14.4	24.1
Philippines	36.7	0.9	11.1	7.3	2.7	41.3
Cambodia	27.7	1.5	8.9	9.8	4.6	47.6
Vietnam	21.0	10.4	0.5	0.6	62.5	4.9
Brunei	29.2	0	27.7	12.5	15.9	14.8
Timor-Leste	0	26.1	0	0	0	73.9*
Singapore	0	0	0	0	0	0
Total	29.9	21.7	16.3	15.4	4.2	12.3

Countries are ordered by total mangrove lost. Percentages might not sum to 100 owing to rounding.
*The small amount of mangrove deforestation in Timor-Leste is due mainly to shoreline erosion.

The Strategic Issues



1. Scattered data, information, knowledge, skills, and experiences of mangrove ecosystem management and its technical measures



2. Condition that shows less of awareness, understanding, and capacity of certain stakeholders on mangrove ecosystem management



3. Differences of view, interests, and understanding among stakeholders, in and among AMS, concerning the sustainability of the effort to achieve the local, national, regional, and global goals

The needs



1. To provide information platform, comprehensive profile, and knowledge management of ASEAN Mangrove Ecosystem



2. To promote the urgency and importance of mangrove ecosystem



3. To enhance capacity and performance of all stakeholders for sustainable mangrove ecosystem management at the policy and technical level



4. To develop understanding in addressing common, regional, and global challenges

The background of the slide is a photograph of a mangrove forest. The top half shows a dense canopy of green leaves. The bottom half shows the intricate, gnarled roots of mangrove trees extending into a body of water. A semi-transparent brown banner is overlaid on the top half, and a semi-transparent green banner is overlaid on the bottom half.

The urgent call: Sustainable Mangrove Ecosystem Management in the ASEAN Region

A large, solid red arrow points downwards from the top banner to the bottom banner.

The ASEAN Network and Strategy on Sustainable Mangrove Ecosystem Management



ASEAN Mangrove Network (AMNET)

AMNET is a cooperation network for enhancing mangrove management in ASEAN Region, under the coordination of the ASEAN Working Group on Forest Management (AWGFM)

AMNET aims to:

1. Support, promote, and build the existing mangrove ecosystem management (including conservation, protection, restoration, and sustainable use of the mangrove ecosystem) in the ASEAN Region.
2. Become a platform for bringing better environment and livelihoods for the people living along the coastal areas in the ASEAN Region.

The ASEAN Mangrove Network (AMNET)

Year	Brief history of AMNET establishment
2012	Indonesia Initiated ASEAN Mangrove Network (AMNET) at the 14 th ASOF Meeting
2012	The purpose of this Network is to promote sharing of regional knowledge as well as to broaden ASEAN knowledge on mangrove ecosystem management
2013	The 1 st meeting of AMNET was held in Jakarta, titled The ASEAN Government Official Meeting on Mangrove Ecosystem, proposing idea on AMNet activities
2014	The 2 nd meeting of AMNET was held in Balikpapan, East Kalimantan, agreed the ToR, RoP and Workplan

In 2023, about 10 years after the 1st Meeting of AMNet, the process of formulation and establishment of the ASEAN Strategy on Sustainable Mangrove Ecosystem Management was started, and taken to the 27th Meeting of ASOF in 2024 for its endorsement.

The ASEAN Strategy on Sustainable Mangrove Ecosystem Management

To aim for sustainably managed and conserved mangrove ecosystems in the ASEAN Region, to achieve mangroves' ecosystem health and coastal resilience including community welfare, and to contribute to the global agenda/commitment.

The strategy unites the ASEAN movement in mangrove management and respects the sovereignty of each country.

Outline of the Strategy:

- 1. Introduction (Background and Objective)**
- 2. Mangrove Ecosystem Dynamics**
- 3. Mangrove Conditions and Management Experiences**
- 4. Strategic Issues**
- 5. The Relevant Global and Regional Frameworks**
- 6. Scientific-based Management**
- 7. Strategy**
- 8. Implementation**



Things to pay attention to

General Conditions and Management Experiences

Relevant Global and Regional Frameworks



UNGA



UNFCCC



UNCBD



UNEA



Wetlands
Convention



ASEAN
Frameworks

SDGs, Paris Agreement, Kunming-Montreal Biodiversity Framework, UNEA Resolution on Sustainable Management for Global Health of Mangroves, Wetlands Convention, ASEAN Frameworks, and other relevant global and regional frameworks

Mangrove Ecosystem Dynamics

- Mangrove characteristics
- Mangrove ecosystem function
- Mangrove ecosystem typology
- Landscape conditions
- Climate change-related dynamics

Scientific-based Management

- Ecosystem-based approaches
- Nature-based solutions
- Climate Change Mitigation and Adaptation
- Landscape-based Approach
- Community-based Approach



The Goal

Sustainably managed and conserved mangrove ecosystems in ASEAN Region, to achieve mangroves' ecosystem health and coastal resilience, and to contribute to the global agenda/commitment



Enhanced coastal resilience

Restored ecosystem and sustained biodiversity

Improved community livelihood and prosperity

Increased carbon sequestration and stock

Strengthened position of ASEAN in facing common, regional, and global challenges

The Outcome

The Output



**Developed ASEAN
mangrove
ecosystem profile**



**Implemented and shared
best practices of
conservation, protection,
restoration, and
sustainable use of
mangroves ecosystem in
ASEAN Region**



**Enhanced mangrove
ecosystem
governance in each
AMS**



**Maintained and
rehabilitated
mangrove areas in
each AMS**



**Enhanced understanding and
harmonized effort among AMS
in facing common, regional,
and global challenges related
to mangrove ecosystem
management**

The Strategy

-  Mapping and assessing mangrove ecosystems in ASEAN Region
-  Promoting the urgency of and enhancing capacity for conservation, protection, restoration, and sustainable use of mangrove ecosystems in ASEAN Region
-  Strengthening governance as well as establishing & implementing appropriate policy related to mangrove ecosystem management in each AMS
-  Implementing appropriate technical interventions of conservation, protection, restoration, and sustainable use of mangrove ecosystem in each AMS
-  Enabling understanding among AMS in facing common, regional, and global challenges related to mangrove ecosystem management

Focus Area and Scheme of Activities

Focus Area

1. Data inventory, mapping, and assessment
2. Protection and Conservation
3. Restoration and Rehabilitation
4. Sustainable Use and Community Livelihoods
5. Community awareness and engagement
6. Biodiversity preservation
7. Climate Change Mitigation
8. Coastal Resilience and Climate Change Adaptation
9. Integrated Coastal Management and Land Use Planning
10. Handling unsustainable use of mangroves and illegal trading of unsustainable mangrove products
11. Policy and Regulation for legal certainty, compliance, and law enforcement

Scheme of Activities

1. Sharing knowledge and experiences
2. Developing regional indicators of mangrove ecosystem health
3. Developing models of mangrove ecosystem management
4. Developing a platform as an information hub
5. Training
6. Joint research
7. Joint monitoring and reporting
8. Joint publishing of periodic ASEAN Mangrove Profile
9. Developing and implementing the strategy in each AMS
10. Policy dialogue in and among AMS

Guide for Action Plan of the Strategy

Strategy 1

Mapping and assessing mangrove ecosystems in ASEAN Region

Action Plan:

- | | |
|----|---|
| 1. | Sharing knowledge and experiences on inventory, mapping, and assessment, including measuring mangrove ecosystem health or degradation |
| 2. | Developing regional indicators on mangrove ecosystem health |
| 3. | Training on inventory, mapping, and assessment of mangrove ecosystem |
| 4. | Joint monitoring and reporting |
| 5. | Developing and implementing the inventory, mapping, and assessment in each AMS |
| 6. | Joint publishing periodic Profile of ASEAN mangrove ecosystem |

Strategy 2

Promoting the urgency, managing knowledge, and enhancing capacity for conservation, protection, restoration, and sustainable use of mangrove ecosystems in ASEAN Region

Action Plan:

- | | |
|----|---|
| 1. | Enhancing community awareness, campaigning, and engaging all relevant stakeholders including the local community on the urgency of mangrove ecosystem conservation, protection, restoration, and sustainable use. |
| 2. | Applying appropriate scientific-based management, sharing knowledge, experiences, and best practices, and establishing technical guidelines on conservation, protection, restoration, and sustainable use of mangrove ecosystem. |
| 3. | Developing models of mangrove ecosystem management |
| 4. | Developing a platform as an information hub |
| 5. | Organizing training on conservation, protection, restoration, and sustainable use of mangrove ecosystems as well as biodiversity preservation, climate change mitigation and adaptation, coastal resilience, integrated coastal management, and mangrove ecosystem-related land use planning. |

Strategy 3

Strengthening governance as well as establishing and implementing appropriate policy related to mangrove ecosystem management in each AMS

Action Plan:

1.	Sharing knowledge, experiences, and best practices on appropriate policy, institutional arrangement, approaches, and implementation for conservation, protection, restoration, and sustainable use of mangrove ecosystem, as well as for legal certainty, compliance, and law enforcement.
2.	Sharing knowledge, experiences, and best practices for preparing a management plan for mangrove ecosystem, including target setting, roles sharing among stakeholders, internalizing the plan into the development plan, sectoral plan, spatial plan, zoning regulation, permits, incentives-disincentives, and penalties.
3.	Ensuring social and environmental safeguard, i.e., through environmental assessment, the implementation of Grievance Redress Mechanism (GRM), public consultation, and understanding and acceptance of the local community and other relevant stakeholders to the policy and plan that will be implemented.
4.	Enhancing capacity of relevant stakeholders including the local community to be involved in planning, implementation, monitoring and evaluating the policy and its implementation, as well as reporting field conditions and threats.
5.	Sharing knowledge, experiences, and best practices for identifying and handling crucial cases in mangrove ecosystem management, i.e., socio-economic and tenurial issues.
6.	Preparing scheme and methods for incorporating program-related mangrove ecosystem management into the framework of the relevant global agenda, in particular Nationally Determined Contribution (NDC) of climate change convention, biodiversity convention, wetlands convention, and the UN decade on ecosystem restoration.

Strategy 4

Implementing appropriate technical interventions and technology in conservation, protection, restoration, & sustainable use of mangrove ecosystems in each AMS

Action Plan:

1.	Identifying the critical area to be conserved, protected, and restored, and to be ensured the sustainable use of the mangrove ecosystems, based on bio-physical conditions such as tidal, salinity, mud, and substrates for suitable habitat, and biodiversity; and socio-economic conditions such as land states, socio-economic function, and history of the land use and the land cover; vulnerability; and ecosystem services.
2.	Identifying biophysics characteristics and conditions such as habitat zone, sedimentation, sea level, sea wave, and other oceanographic dynamics; and socio-economic characteristics and conditions, i.e., local culture, local knowledge, and livelihood, to be referred to and taken into account in determining and deciding appropriate interventions.
3.	Identifying and applying the appropriate, best practicable, and environmentally friendly technical or technological interventions needed including for preparing macro-meso and site-plans; bio-physics and socio-economic pre-conditions; technical arrangement such as planting pattern and civil engineering support needs; seeds and nursery for mangrove rehabilitation; hydrological treatment; sea level adjustment; sea wave control; pests and diseases control; online monitoring; and "Smart Nursery".
4.	Ensuring the accompaniment of experts or field instructors in the implementation of the technical interventions.
5.	Involving and enhancing capacity of local community including local champions, traditional figures, and village leaders as well as women and youth in the planning, implementation, monitoring, and evaluation of the program/activities, through facilitating community discussions, field school, information and education center and platform, and sharing learning and spirit among communities, with the presence of the local leadership.
6.	Explore opportunities to enhance socio-economic benefits for the local community, including through engaging other stakeholders in the effort, i.e., through the scheme of environmentally friendly sylvo-fishery, eco-tourism, food derivative products as well as for packaging and marketing of the product including promoting, branding, and off-taking.
7.	Ensuring periodic monitoring and evaluation of the field conditions, and the performance of conservation, protection, restoration, and sustainable use of mangrove ecosystems.
8.	Joint research on conservation, protection, restoration, and sustainable use of mangrove ecosystems as well as biodiversity preservation, climate change mitigation and adaptation, coastal resilience, integrated coastal management, and mangrove ecosystem-related land use planning

A photograph of a mangrove forest with dense green foliage and prominent tree roots extending into a body of water under a clear blue sky.

Strategy 5

Enabling understanding among AMS in facing common, regional, and global challenges related to mangrove ecosystem management

Action Plan:

1.	Identifying specific and crucial conditions that need understanding and cross-boundary policy related to mangrove ecosystem management, i.e., regarding illegal trading of unsustainable mangrove products or products from unsustainable activities in mangrove ecosystems.
2.	Developing mechanisms for cross-boundary policy dialogue and cooperation on needed understanding among AMS.
3.	Formulating understanding and its appropriate instruments in facing the specific and crucial conditions as well as common and global challenges related to mangrove ecosystem management, particularly through control and enforcement mechanisms, i.e., product certificates and labels, and banning illegal trading.
4.	Integrating and consolidating the needed understanding in the appropriate ASEAN-related Agenda, including through the platform of the ASEAN Mangrove Network.
5.	Campaigning and establishing publications on important advancements of the achieved understanding to be complied with by all relevant stakeholders.

Implementation Target

No	Strategy	Year						
		2024	2025	2026	2027	2028	2029	2030
1	Mapping and assessing mangrove ecosystems in ASEAN Region	V	V	V	V	V	V	V
2	Promoting the urgency, managing knowledge, and enhancing capacity for conservation, protection, restoration, and sustainable use of mangrove ecosystems in ASEAN Region	V	V	V	V	V	V	V
3	Strengthening governance as well as establishing and implementing appropriate policy related to mangrove ecosystem management in each AMS		V	V	V	V	V	V
4	Implementing appropriate technical interventions of conservation, protection, restoration, and sustainable use of mangrove ecosystem in each AMS	V	V	V	V	V	V	V
5	Enabling understanding among AMS in facing common, regional, and global challenges related to mangrove ecosystem management		V	V	V	V	V	V

Output Achievement Target

No	Target	Year						
		2024	2025	2026	2027	2028	2029	2030
1	Developed ASEAN mangrove ecosystem profile			1 st Profile			2 nd Profile	
2	Implemented and shared best practices of conservation, protection, restoration, and sustainable use of mangroves ecosystem in ASEAN Region	Information hub established						
3	Enhanced mangrove ecosystem governance in each AMS		25%	50%	75%		100%	
4	Maintained and rehabilitated mangrove areas in each AMS			V	V	V	V	V
5	Enhanced understanding and harmonized effort among AMS in facing common, regional, and global challenges related to mangrove ecosystem management			V	V	V	V	V

Outcome Achievement Target

No	Target	Year						
		2024	2025	2026	2027	2028	2029	2030
1	Enhanced coastal resilience					√	√	√
2	Restored ecosystem and sustained biodiversity					√	√	√
3	Improved community livelihood and prosperity					√	√	√
4	Increased carbon sequestration and stock					√	√	√
5	Strengthened position of ASEAN in facing common, regional, and global challenges related to mangrove ecosystem management					√	√	√

The World Mangrove Centre to support the ASEAN Mangrove Network



Indonesia is developing the World Mangrove Center (WMC), as a center of excellence and information hub on mangrove ecosystem management. The center has an information system, Mangrove Information Center (MIC), Mangrove Research Center (MRC), and other centers providing information on biological aspects, conservation and restoration, socio-economic benefits, carbon, climate, and resilience. The center showcase is located in Tahura Ngurah Rai Mangrove Forest Park, Bali, and has some observatory fields in certain areas in Indonesia. Indonesia hopes the center can support the advancement of Sustainable Mangrove Ecosystem Management in ASEAN Region.



With the spirit of One Vision, One Identity, and One Community,
we achieve our goal together for the sustainability of our environment,
and the prosperity of the ASEAN community