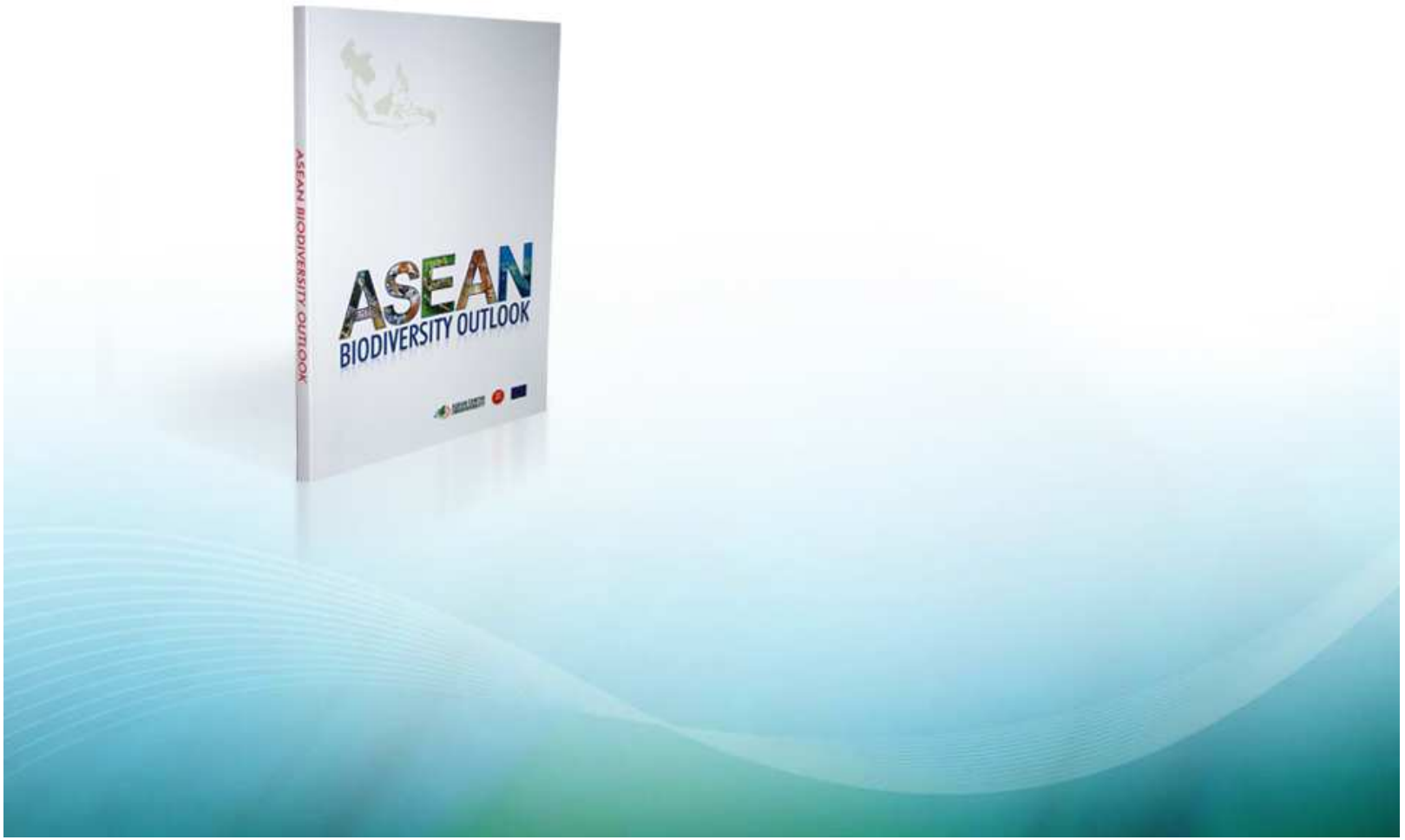
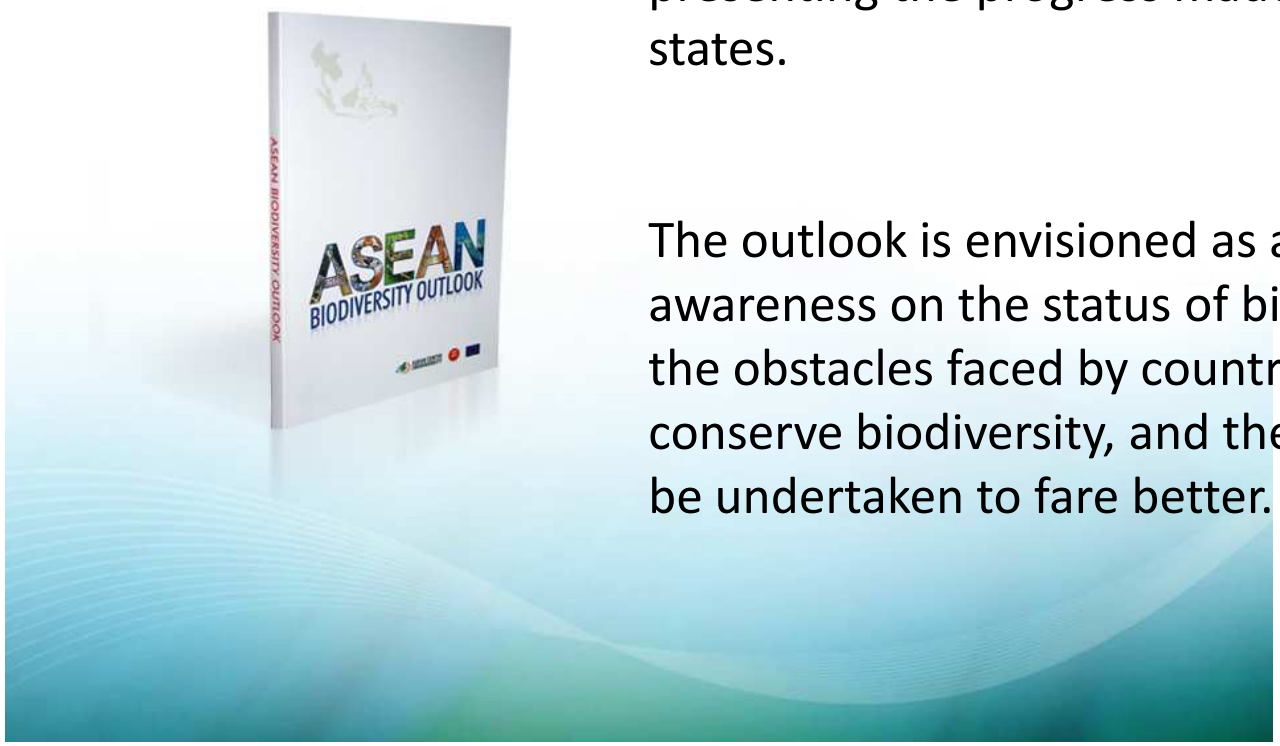
REGIONAL WORKSHOP FOR SOUTH, SOUTH-EAST AND EAST ASIA ON UPDATING NATIONAL BIODIVERSITY STRATEGIES AND ACTION PLANS

Xi'an, China, 9-16 May 2011

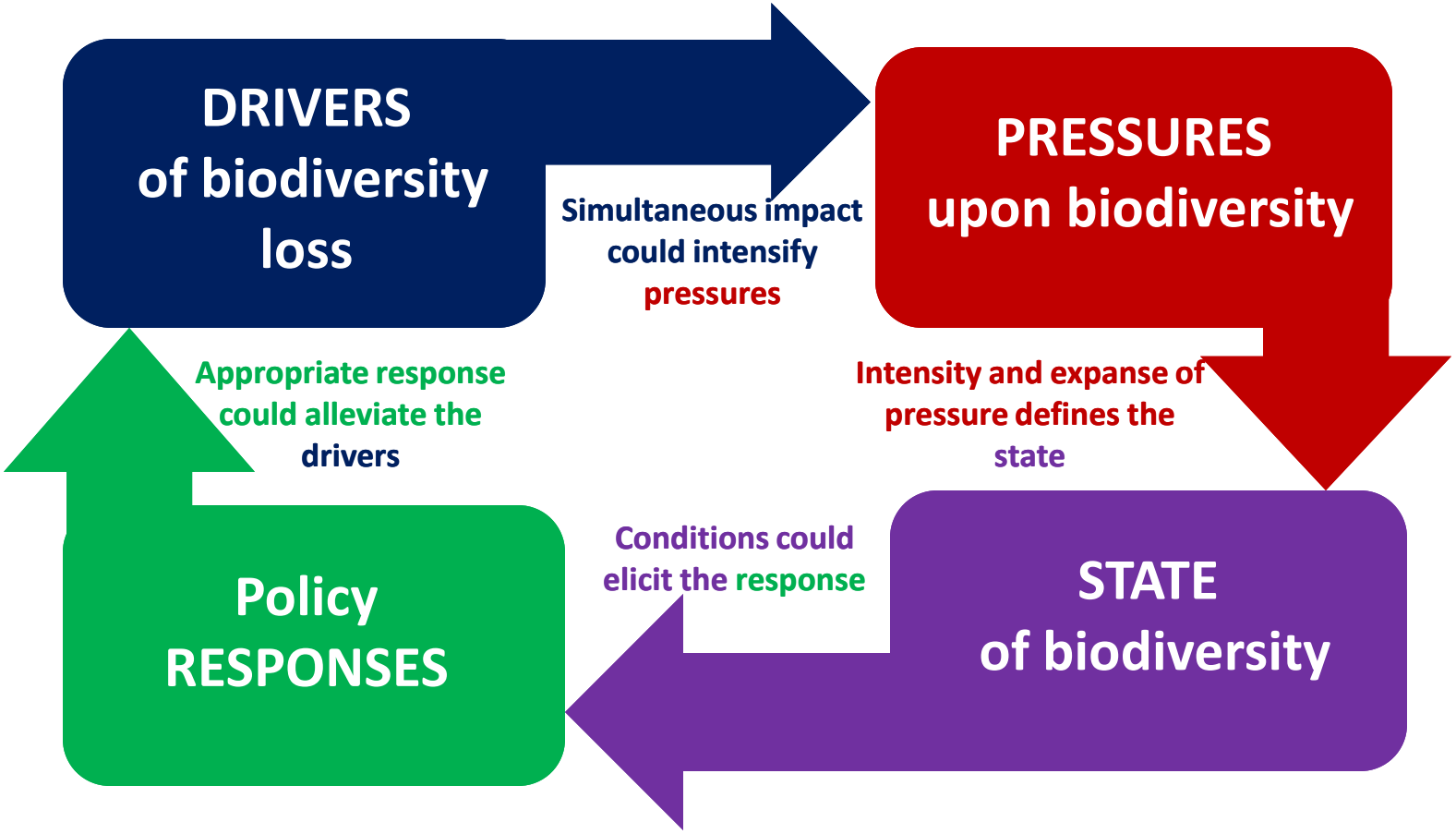




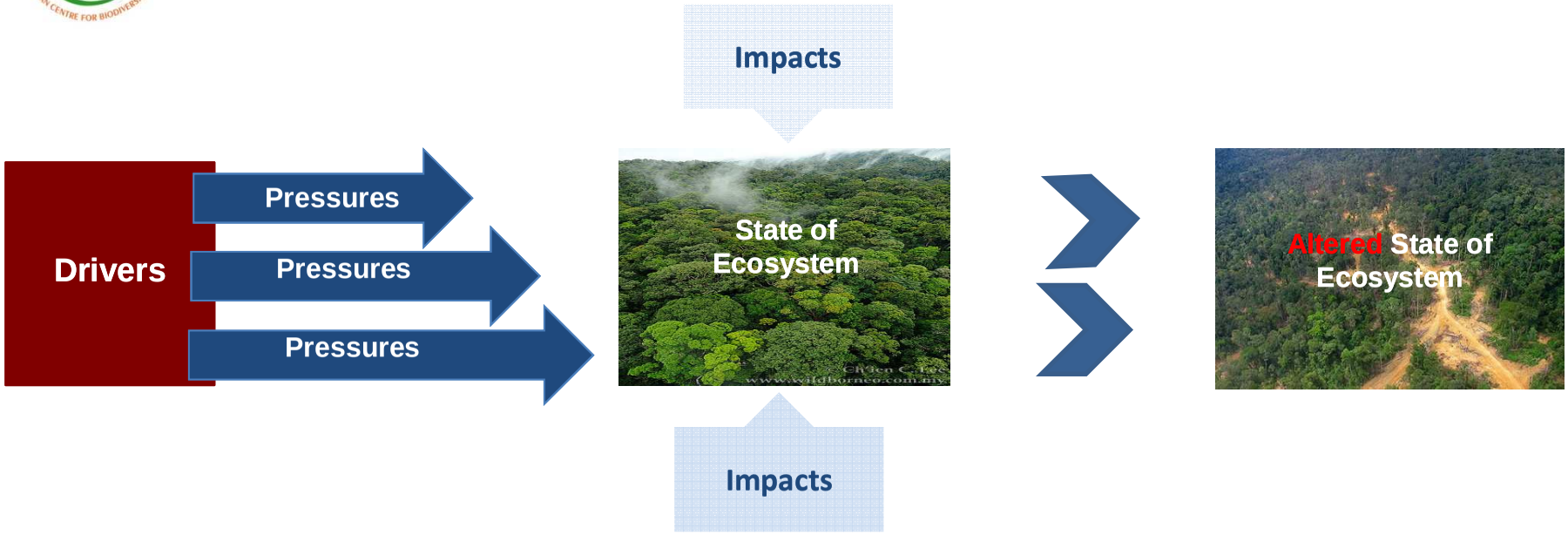
The ASEAN Biodiversity Outlook (ABO) is a modest attempt to show how the ASEAN countries are faring in achieving the biodiversity target by capturing and presenting the progress made by the 10 member states.

The outlook is envisioned as a tool to generate awareness on the status of biodiversity in the region, the obstacles faced by countries in their efforts to conserve biodiversity, and the next steps that have to be undertaken to fare better.

The *ASEAN BIODIVERSITY OUTLOOK* Framework



The ASEAN BIODIVERSITY OUTLOOK Outline



Responding to the challenges of Biodiversity conservation: the ASEAN approach

- Protected areas: Conserving the last frontier
- ASEAN Wildlife Enforcement Network
- ASEAN Capacity for Taxonomy
- ASEAN Framework Agreement on ABS
- ASEAN Socio-cultural Community Blueprint
- Fulfilling ASEAN commitments to the MEAS
- Establishment of ACB
- BISS, CHM, and awareness raising partnerships

The Relevance of Southeast Asia's Biodiversity

Occupies only 3% of the earth's surface but...

Home to 3 mega diverse countries

- **Indonesia**
- **Malaysia**
- **Philippines**

Spans several bio-geographical units

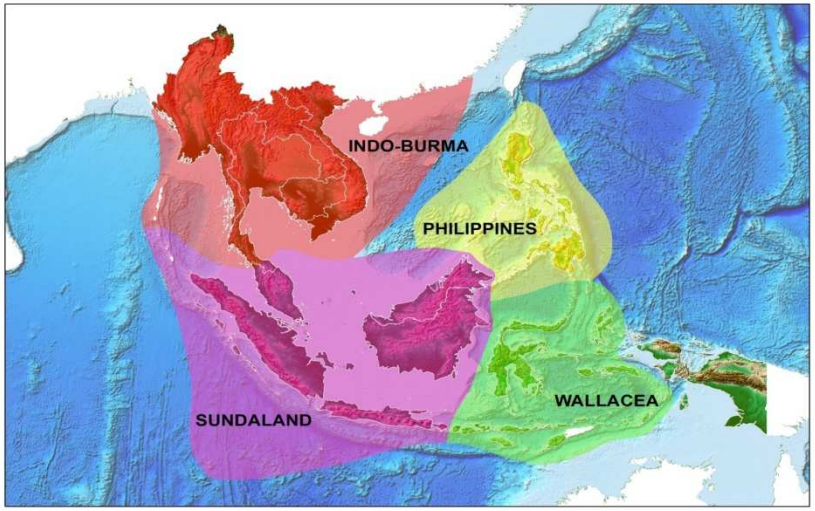
- **Malesia**
- **Wallacea**
- **Sundaland**
- **Indo-Burma**
- **Central Indo-Pacific**

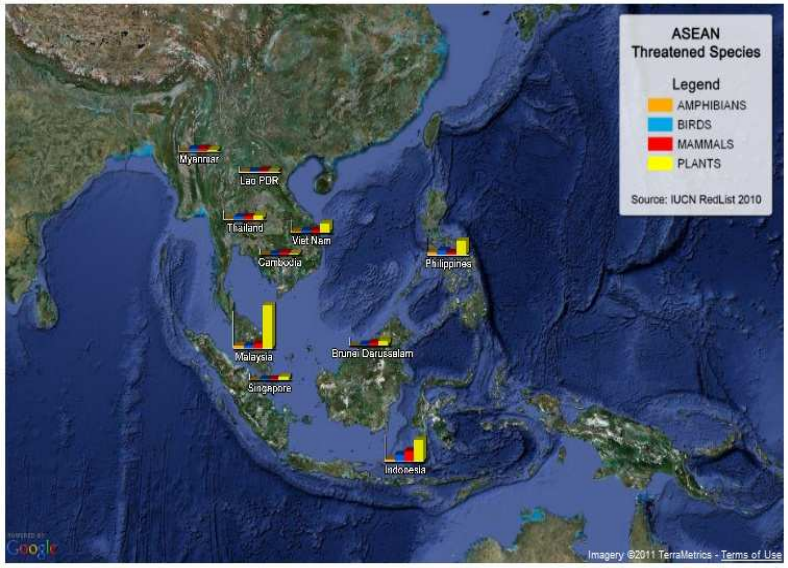
Home to 18% of plants and animal species assessed by IUCN

Has 1/3 of the coral reef areas in the world

The Southeast Asia Region:
Confronted with massive habitat and species loss

Four of the world's 34 biodiversity hotspots





2,517 out of the 47, 915 species are threatened, as assessed by IUCN

The 2010 Biodiversity Target: How did the ASEAN region fare?

Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats and biomes		
●	1.1: At least 10% of each of the world's ecological regions effectively conserved	Up to 12.6% of the ASEAN region's terrestrial land has been designated as protected areas. Six ASEAN Member States have exceeded the 10% target; of the six, Brunei Darussalam, Cambodia and Thailand have set aside more than one fifth of their total land area for protection and conservation. However, efforts need to be directed in improving management effectiveness. Focus should also be made in establishing more marine protected areas given that the region has vast marine and coastal-based resources.
●	4.3: No species of wild flora or fauna endangered by international trade	Significant efforts are being pursued, recognizing that illicit wildlife trade is a major problem among many countries. Many ASEAN Member States are signatories to CITES and are committed to curbing the illegal trade of wildlife. Capacity building activities on wildlife enforcement have been pursued among the ASEAN Member States to combat illegal wildlife trade.
Goal 4. Promote sustainable use and consumption		
Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced		
●	5.1: Rate of loss and degradation of natural habitats decreased	Significant efforts are being undertaken in the region, but the challenge of halting the rate of loss and degradation of natural habitats remains formidable. Although significant progress has been attained in certain ecosystems (i.e., forest) in some countries, overall, the region faces serious problems in reducing the rate of habitat loss.
Goal 7. Address challenges to biodiversity from climate change, and pollution		
●	7.1: Resilience of the components of biodiversity to adapt to climate change maintained and enhanced	Countries are fully aware of the need to adapt to climate change. Most ASEAN Member States have already initiated programs that would address this issue, including activities that will enhance the resilience of ecosystems to the possible impact of climate.
●	7.2: Pollution and its impacts on biodiversity reduced	Pollution reduction has been one of the cornerstone activities for environmental management in all ASEAN Member States. However linking pollution reduction with biodiversity conservation was recognized only recently. Efforts are underway in many countries to explore this connection.
Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods		
●	8.1: Capacity of ecosystems to deliver goods and services maintained	The notion of ecosystem services is now being recognized in the region. While it is clear that the pressure on many of the critical ecosystems that provide public good to society is escalating, there are efforts to ensure that these services are continuously provided and maintained.
●	8.2: Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained	The ASEAN Member States acknowledge that many communities, particularly the marginalized sectors and the poor, rely heavily on biological resources for their well-being. As such, many programs have been developed to respond to these issues. While a number of countries face challenges in sustaining its initiatives, programs now build in designs to ensure that communities would have the capacity to continue relying on these resources, through more sustainable means.
Goal 9. Maintain socio-cultural diversity of indigenous and local communities		
●	9.2: The rights of indigenous and local communities pertaining to their traditional knowledge, innovations and practices, including their rights to benefit sharing, viably protected	Most ASEAN Member States have specific laws and activities that recognize the rights of indigenous and local communities, including their culture and way of life. Initiatives are underway to develop processes that include indigenous communities in the negotiation of their rights for the benefits derived from biological resources and ecosystems services in their areas.
Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources		
●	10.1: All transfers of genetic resources in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture, and other applicable agreements	Some countries have clear laws regarding the transfer of genetic materials which conform to the Bonn Guidelines. Others are starting to develop their respective regulations and/or are awaiting developments on the ABS regime. For international organizations operating in the region, e.g., the International Rice Research Institute, these agreements are closely being adhered to. For transactions that are commercial in nature, these are subject to existing laws and agreements of the host country.
Goal 11. Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention		
●	11.1: New and additional financial resources transferred to developing country Parties to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.	Many countries in the region, particularly the developing countries, have been recipients of numerous ODAs aimed to improve their capacity to meet their commitments to the CBD and other biodiversity-related conventions. Although it is acknowledged that resources are not sufficient, it is significant enough to start a number of critical activities supporting biodiversity conservation.

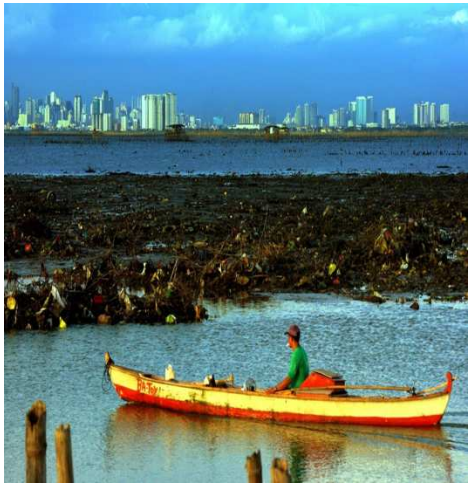
Achieved progress in:

- expanding coverage of terrestrial and marine protected areas
- network of protected areas (i.e. ASEAN Heritage Parks)
- developing capacities and expanding the network of wildlife law enforcers

Remains slow in:

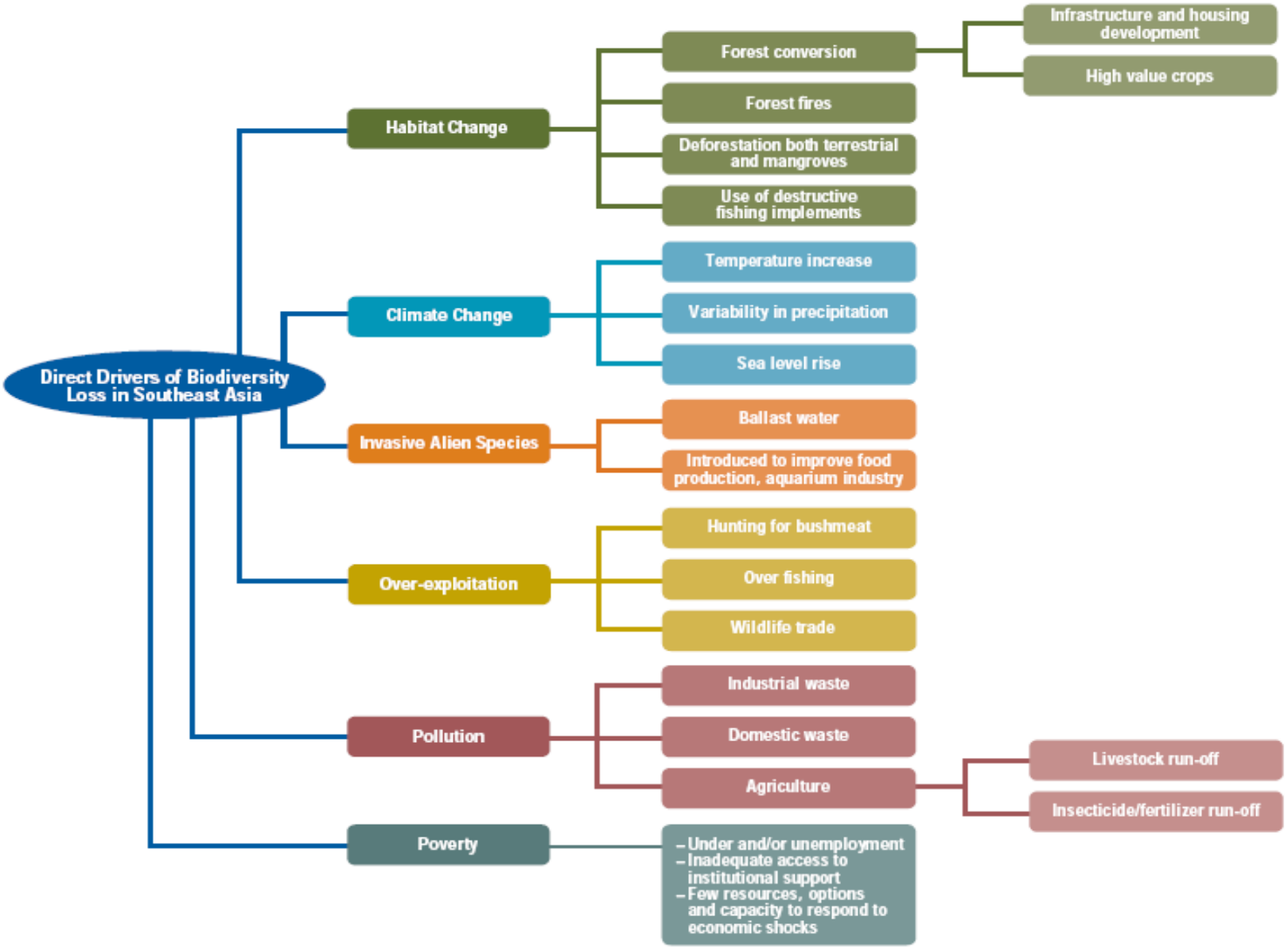
- preventing invasive alien species
- addressing the impact of biodiversity to species and ecosystems
- abating pollution and exploitation of forests and wetlands



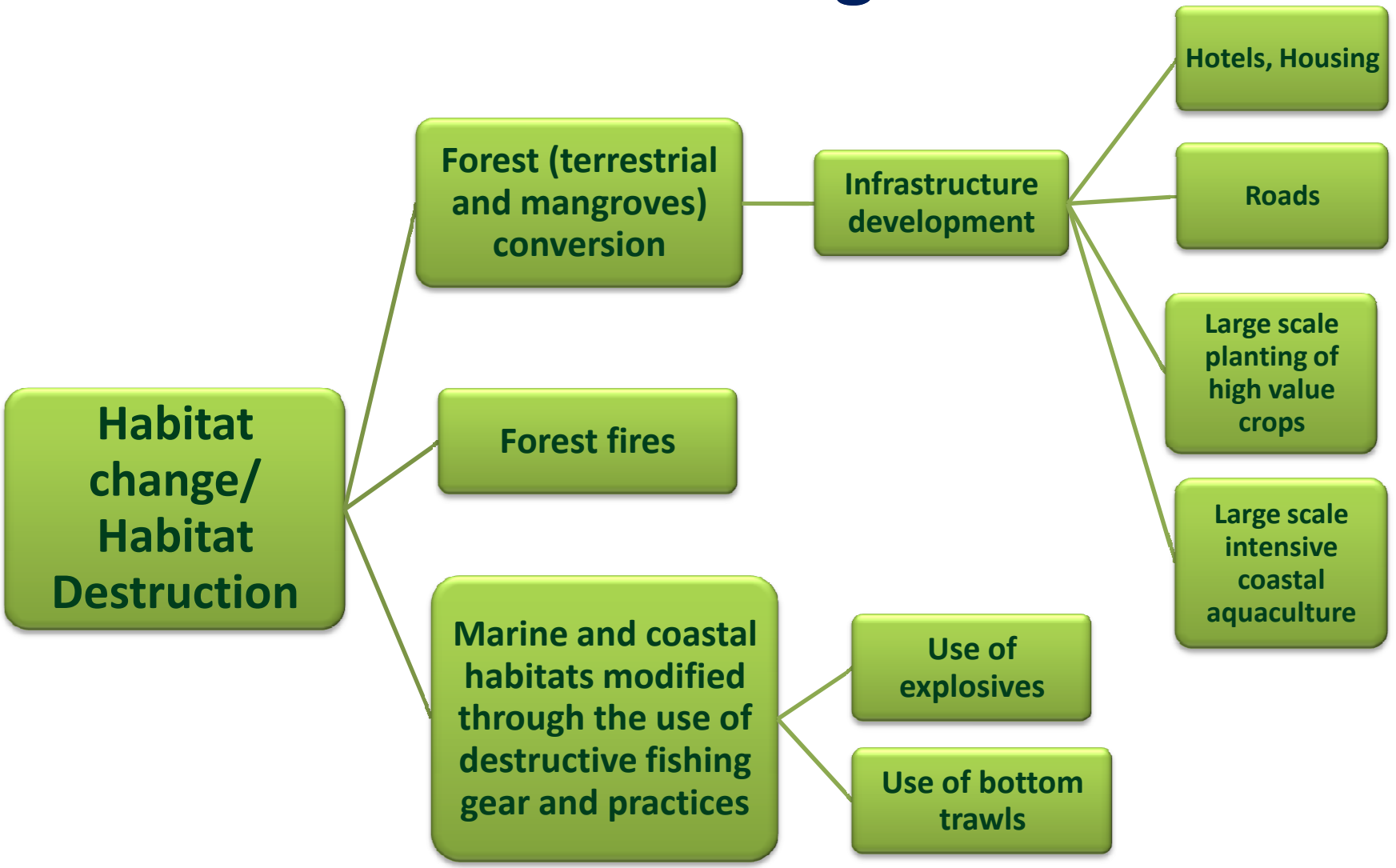


Drivers and Pressure Points

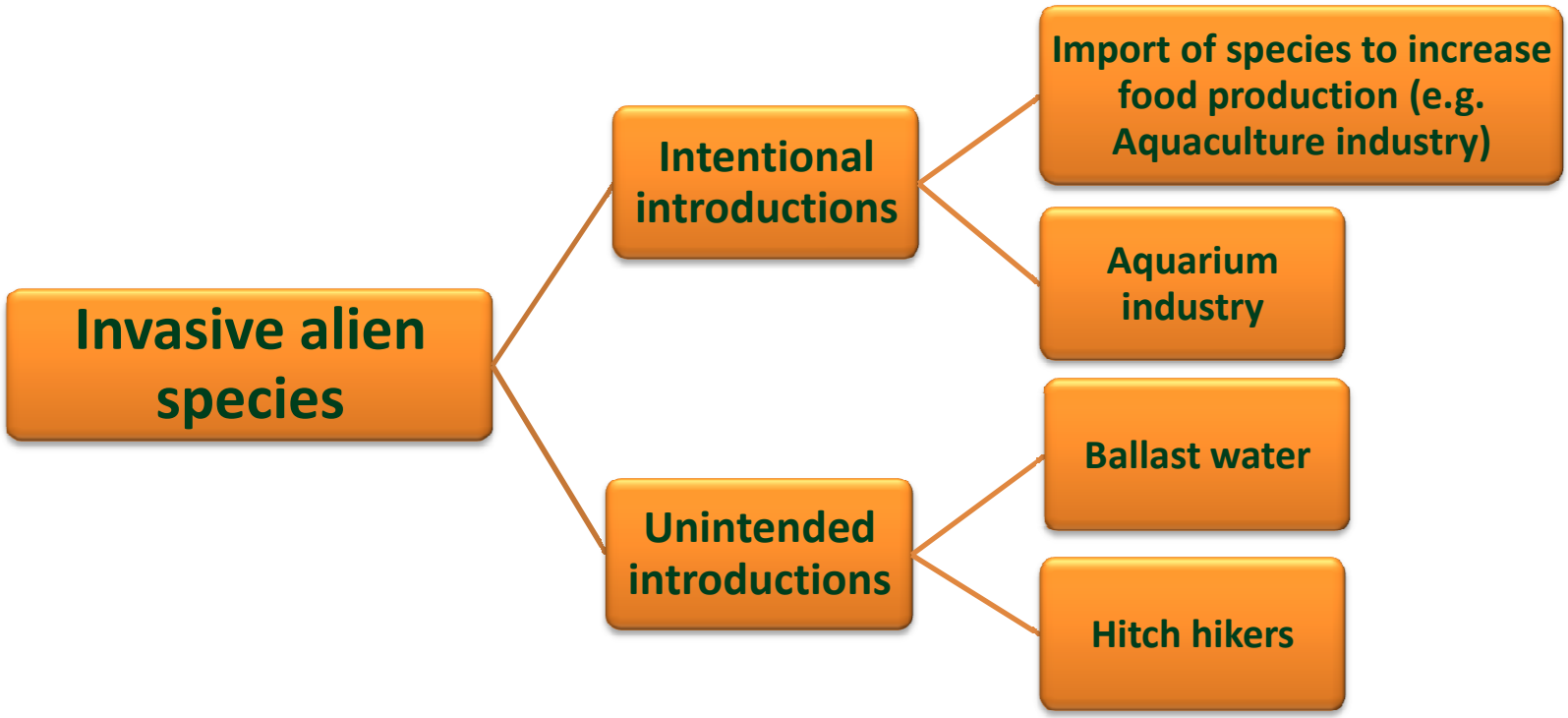
Drivers of Biodiversity Loss in Southeast Asia



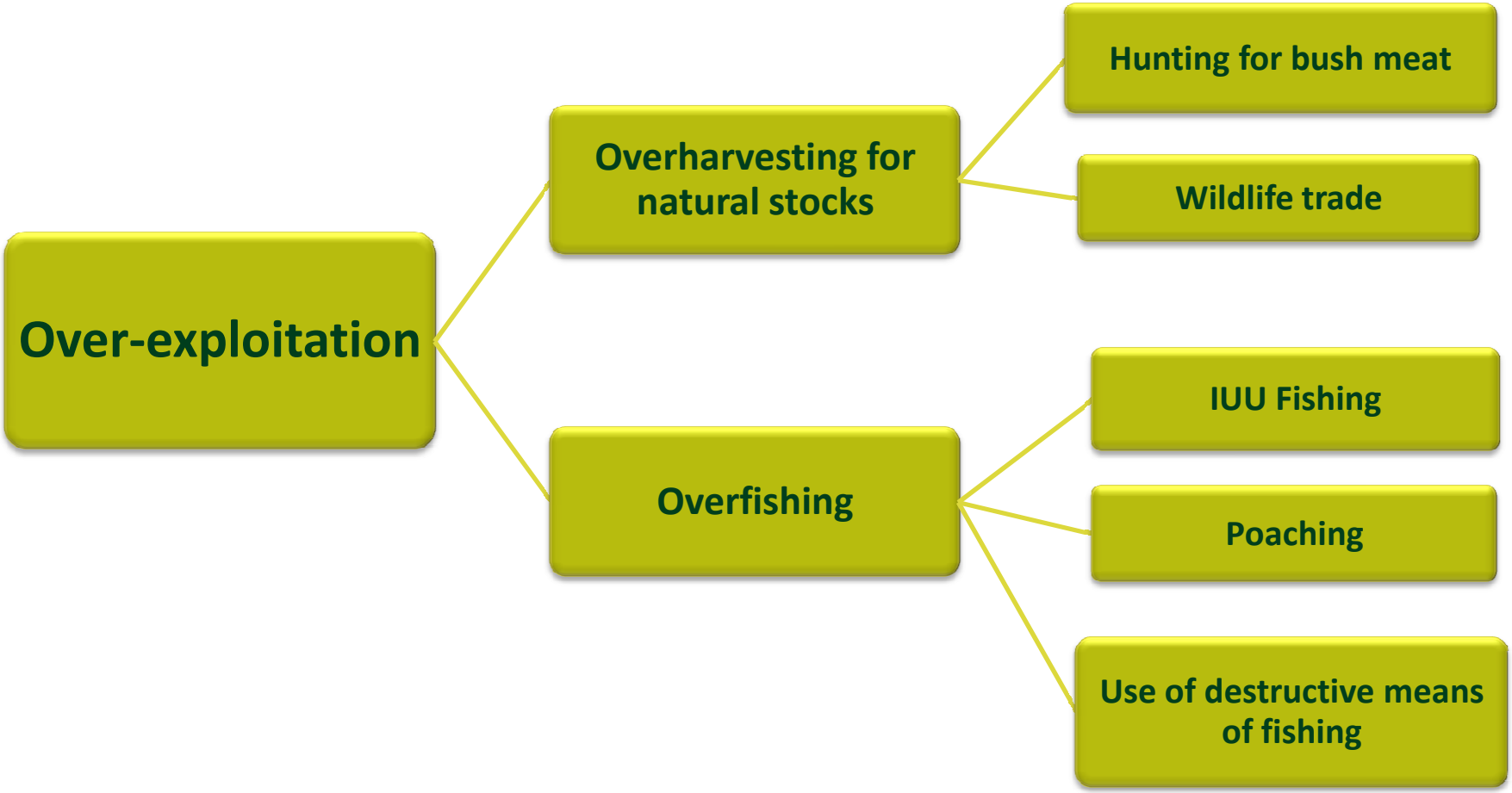
Habitat Change



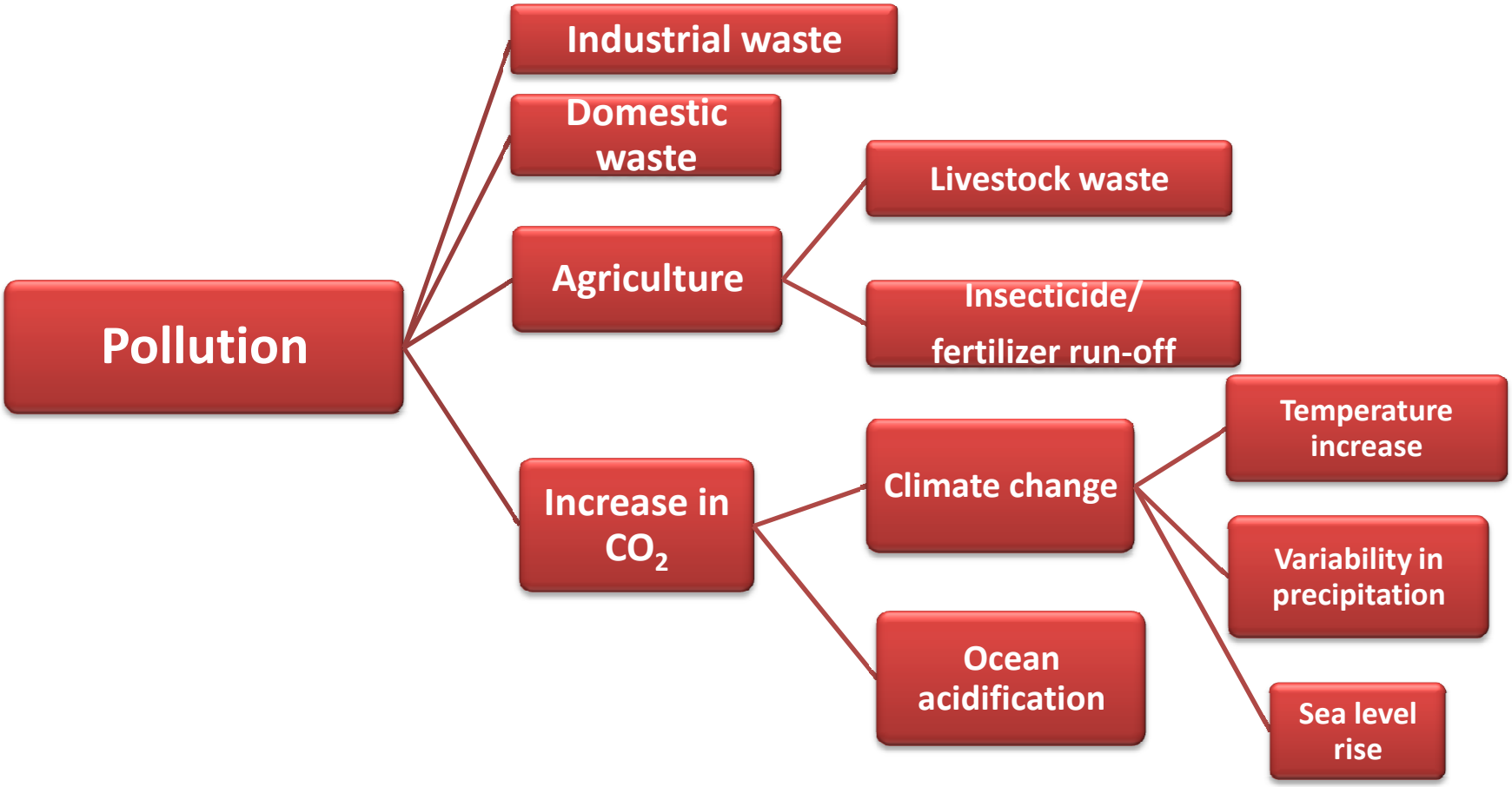
Invasive Alien Species



Over-exploitation



Pollution


Pollution
Industrial waste
Domestic waste
Agriculture
Livestock waste
Insecticide/ fertilizer run-off
Increase in CO_2
Climate change
Temperature increase
Variability in precipitation
Sea level rise
Ocean acidification



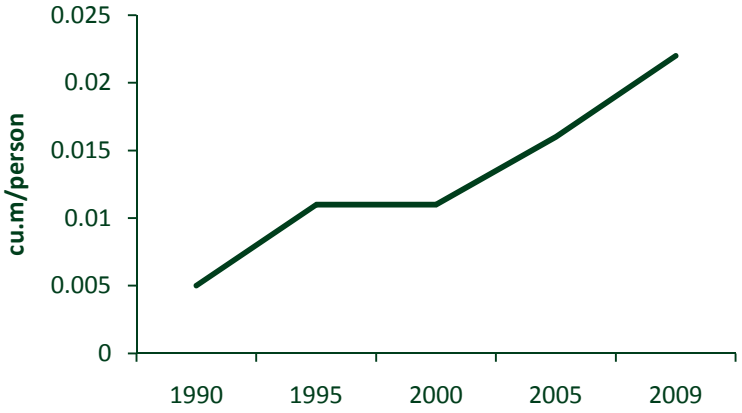

The State of ASEAN Biodiversity

FOREST ECOSYSTEMS: An overdrawn natural wealth
AGRO-ECOSYSTEMS: An emerging hotspot
PEATLANDS: An increasingly valuable ecosystem
INLAND WATERS: The next flashpoint
MANGROVES: A critical support ecosystem
CORAL REEFS: The marine forest
SEAGRASSES: The least understood of the coastal canaries

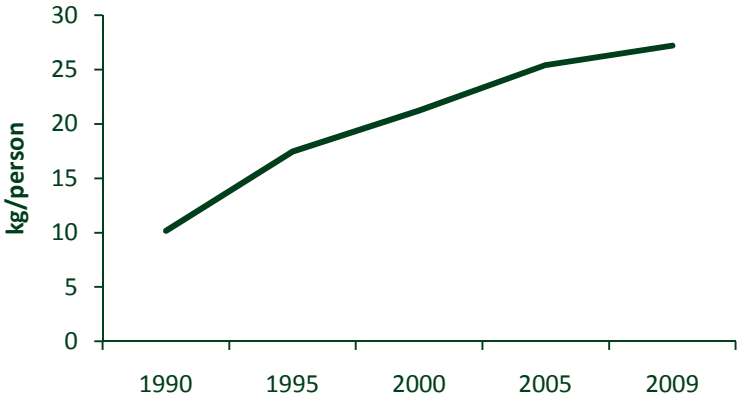
FOREST ECOSYSTEMS: An overdrawn natural wealth

Increasing per capita consumption of forest products

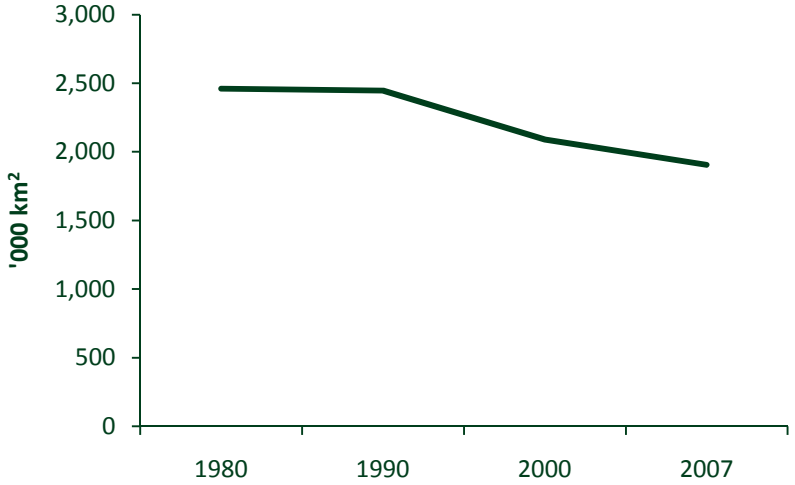
Wood-based panels



Paper and paper board



Decreasing forest area

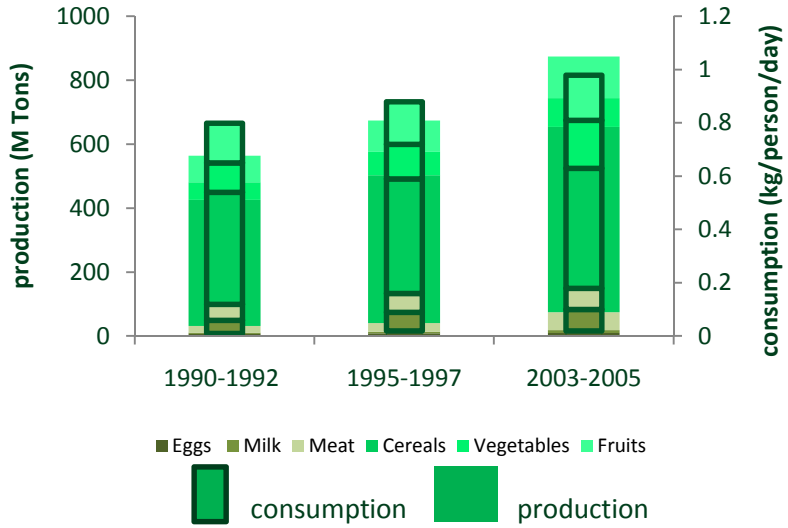


Critical pressure points

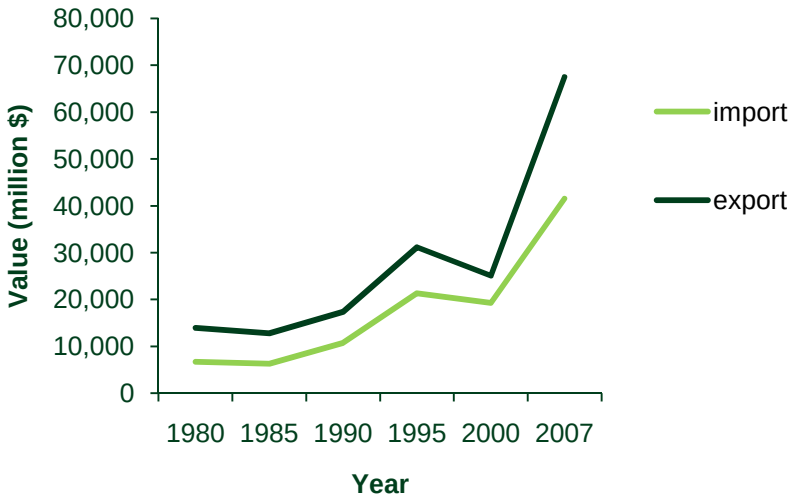
- ***Logging and timber harvesting***
- ***Fires***
- ***Conversion for agricultural use, human settlement and infrastructure development***
- ***Mining and mineral resource extraction***
- ***Invasive alien species***
- ***Poaching/illegal wildlife trade***
- ***Slash and burn farming***

AGRO-ECOSYSTEMS: An emerging hotspot

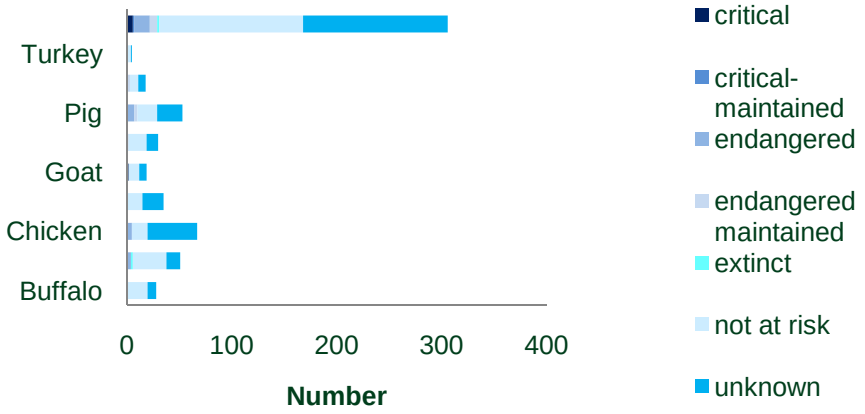
Increasing trends in production and consumption of major agricultural commodity products



Increasing trends in trade of agricultural products



8% of the major livestock breeds extant in the ASEAN region are at risk



Critical pressure points

- ***Replacement of indigenous varieties/breeds***
- ***Globalization of agricultural products***
- ***Habitat destruction***
- ***Pest infestation and diseases***

PEATLANDS: An increasingly valuable ecosystem

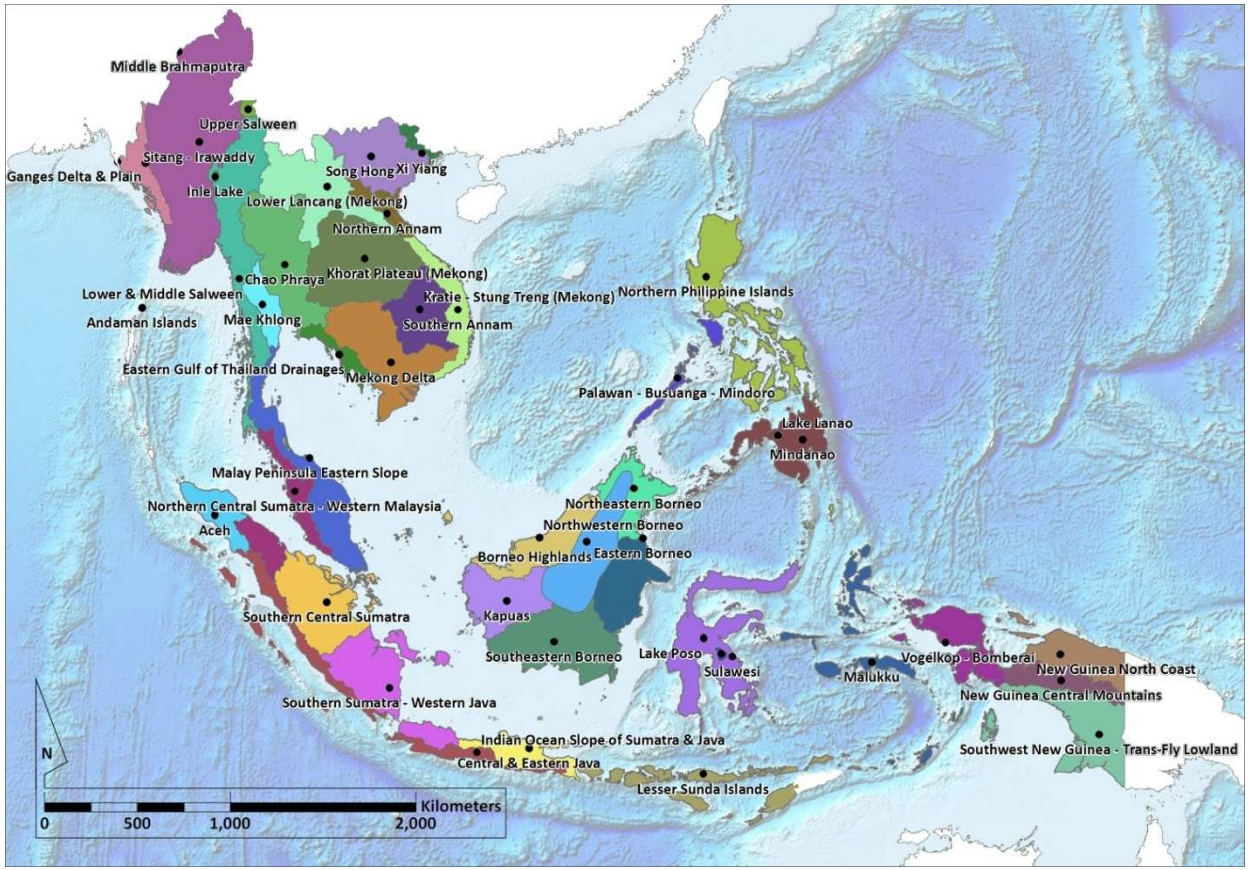
- About 250,000 sq. m. of peatlands, (60 % of the world's tropical peatlands, and about 1/10 of the total global peatland resource)
- Majority of the peatlands located in Indonesia, which has over 70 % of the total peatland cover of Southeast Asia

Critical pressure points:

- ***Conversion for human activities (e.g. oil palm plantation)***
- ***Vulnerability from fires***
- ***Climate change***

INLAND WATERS: The next flashpoint

- Indo-Malaya Realm and the Australsia Realm
- Indo-Malaya Realm has 29 freshwater ecoregions
- Australasia Realm has three freshwater ecoregions with tropical and subtropical coastal rivers located in Sulawesi and the East Timor subregion

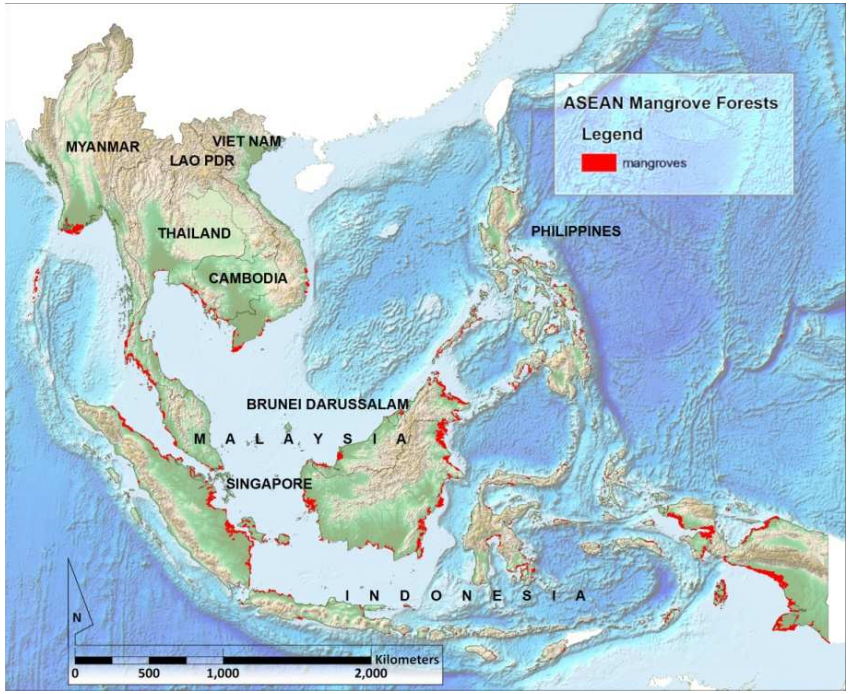


Critical pressure points:

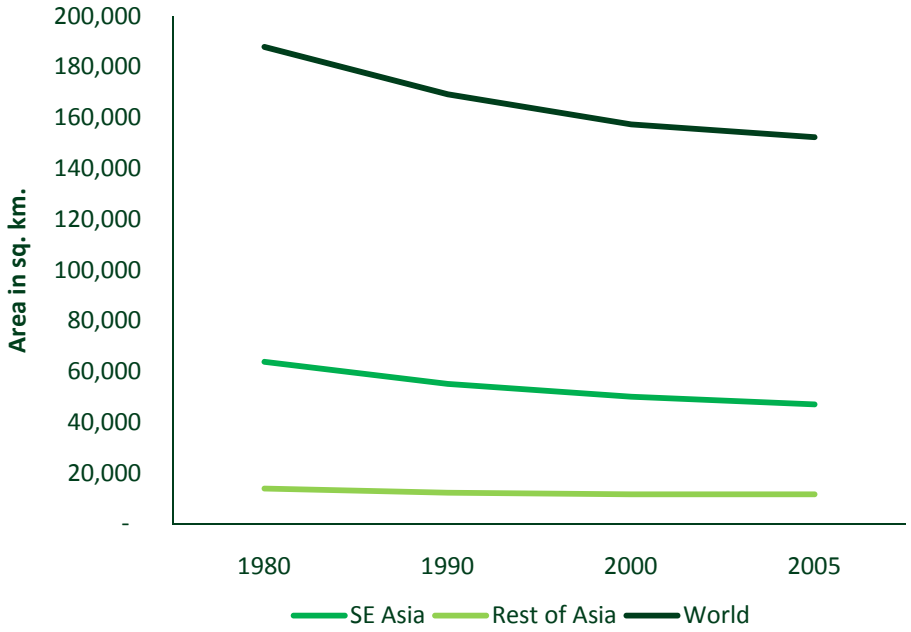
- *Land conversion for infrastructure development*
- *Highly dense population*

MANGROVES: A critical support ecosystem

- Mangroves occupy over 60,000 sq. km.



- Home to 52 true mangrove species; two are listed as critically endangered and endangered

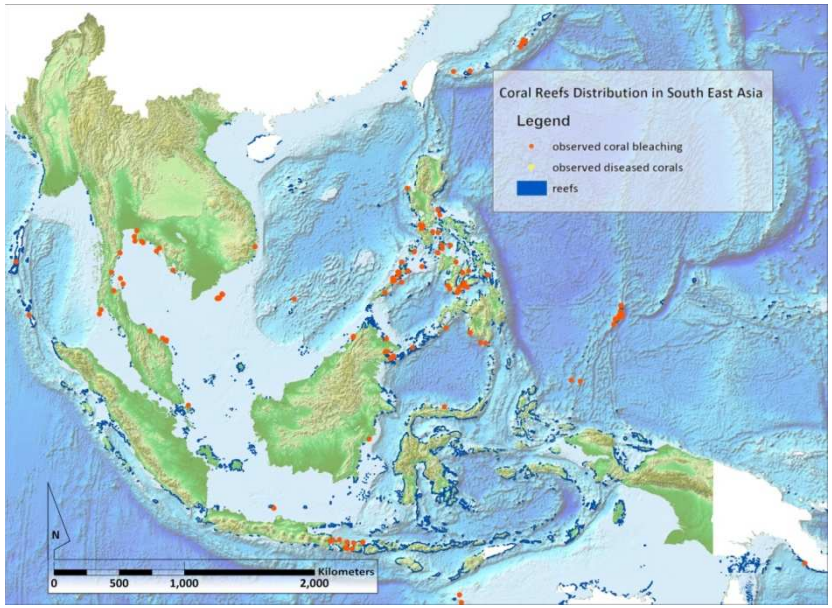


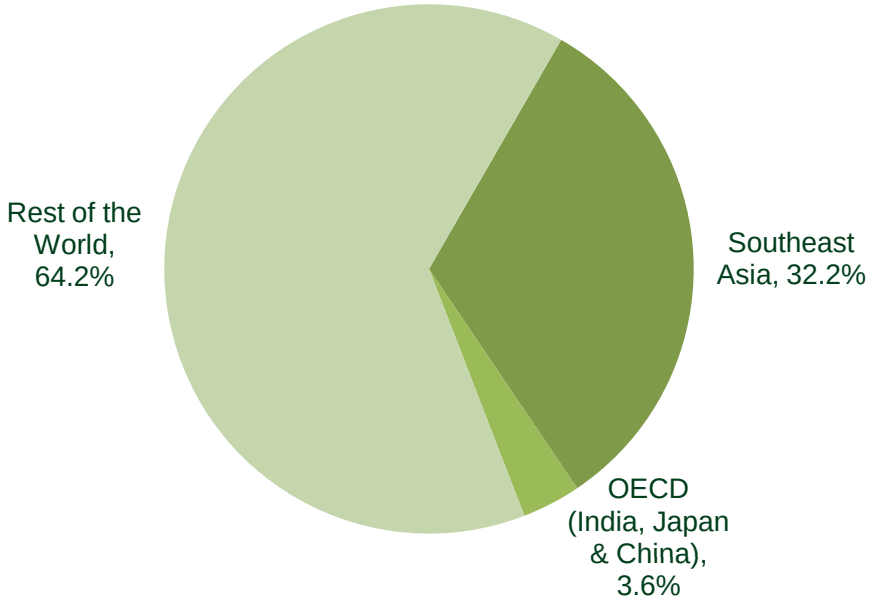
- Decreasing trend in the size of mangrove areas all over Southeast Asia

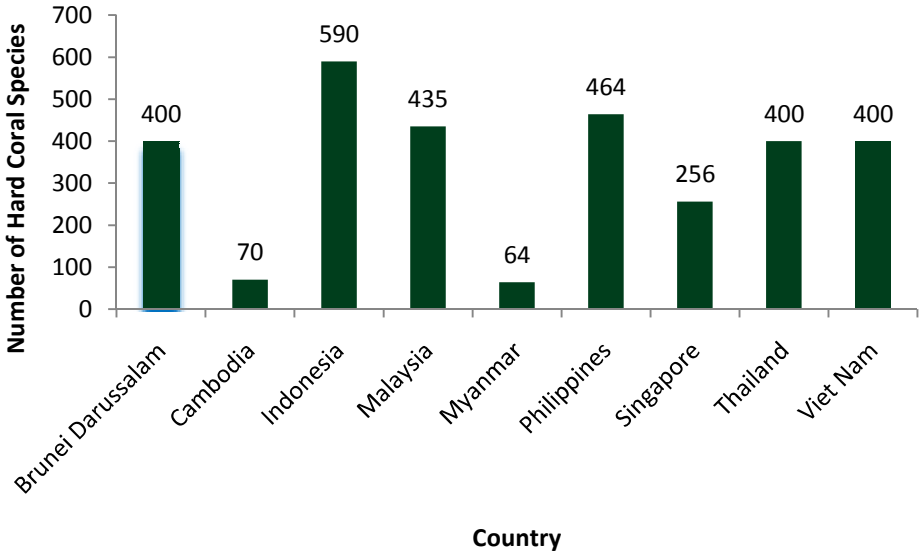
Critical pressure points:

- *deforestation due to domestic demand for fuel and materials for housing*
- *conversion of mangrove forests to either fish or prawn ponds for commercial consumption*

CORAL REEFS: The marine forest



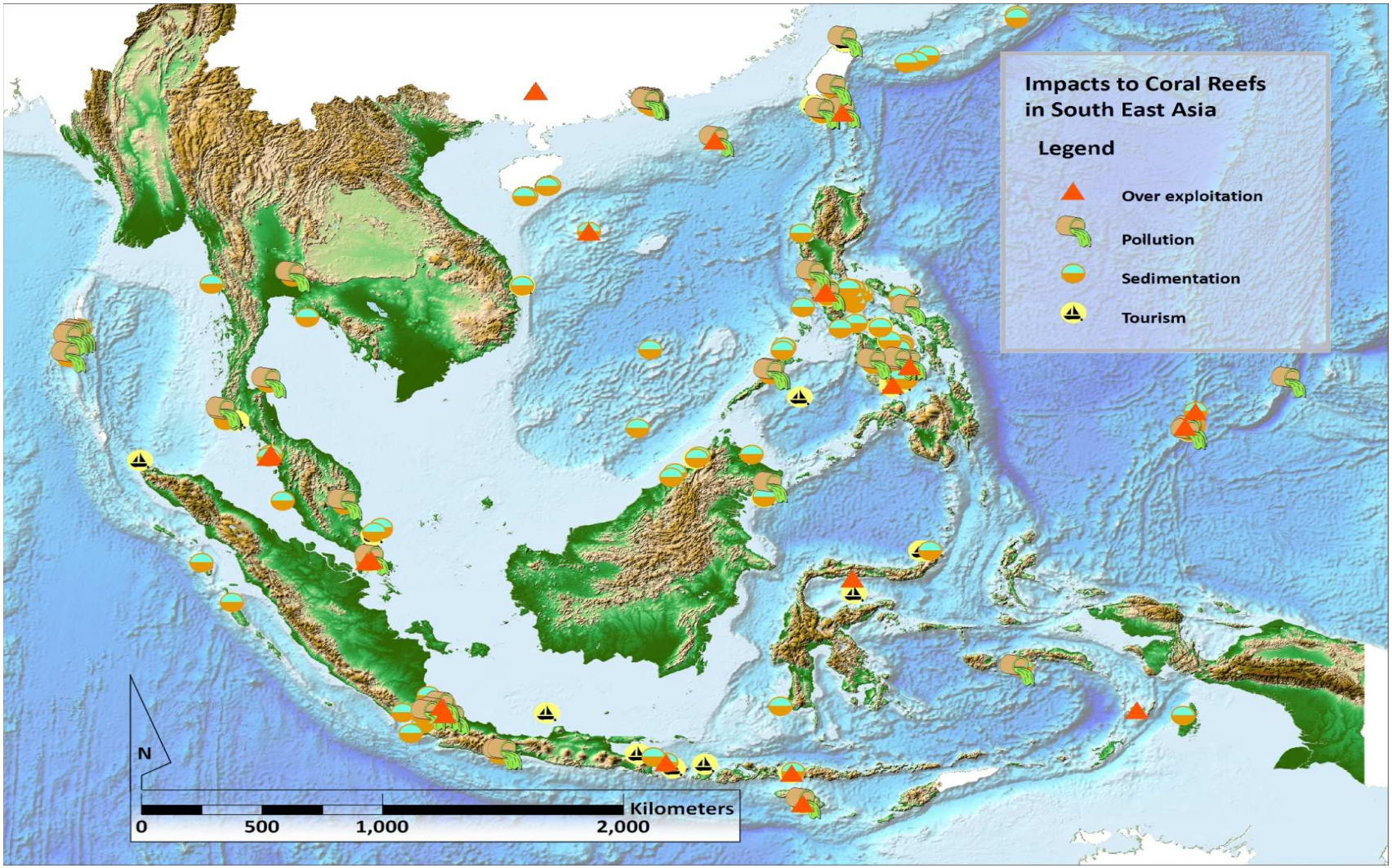




- *spans 86,025 square kilometers*
- *accounts for 1/3 of the global total, which is 11 times larger than the aggregate coral reef area of China, India and Japan*
- *hard coral diversity high in Indonesia, Malaysia, Philippines and Viet Nam, where a total of almost 600 species may be found*

CORAL REEFS: The marine forest

Critical pressure points

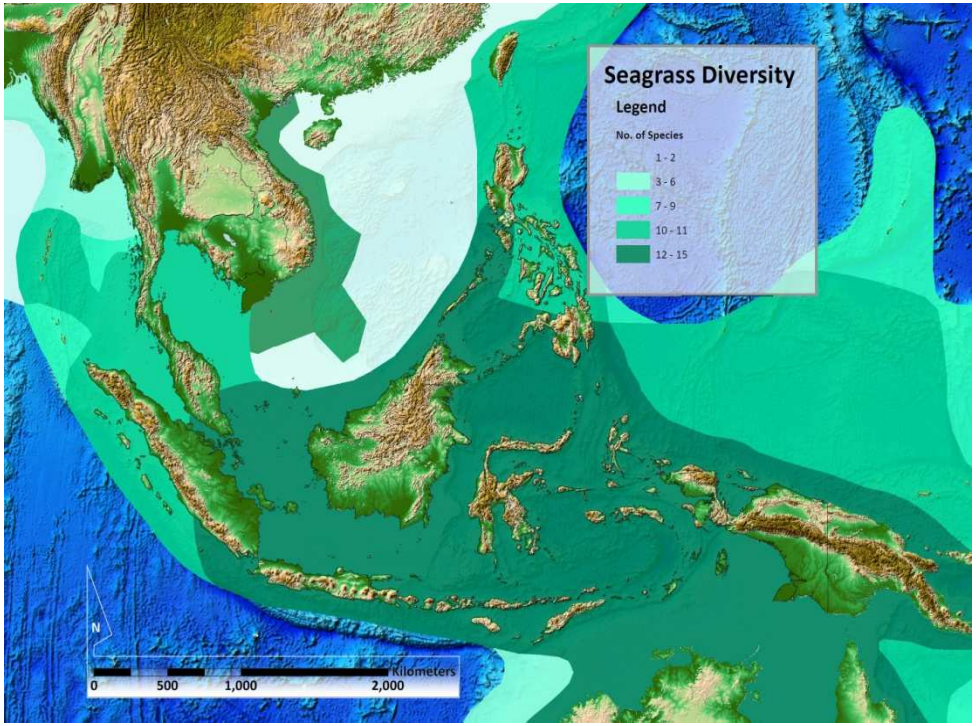


SEAGRASSES: The least understood of the coastal canaries

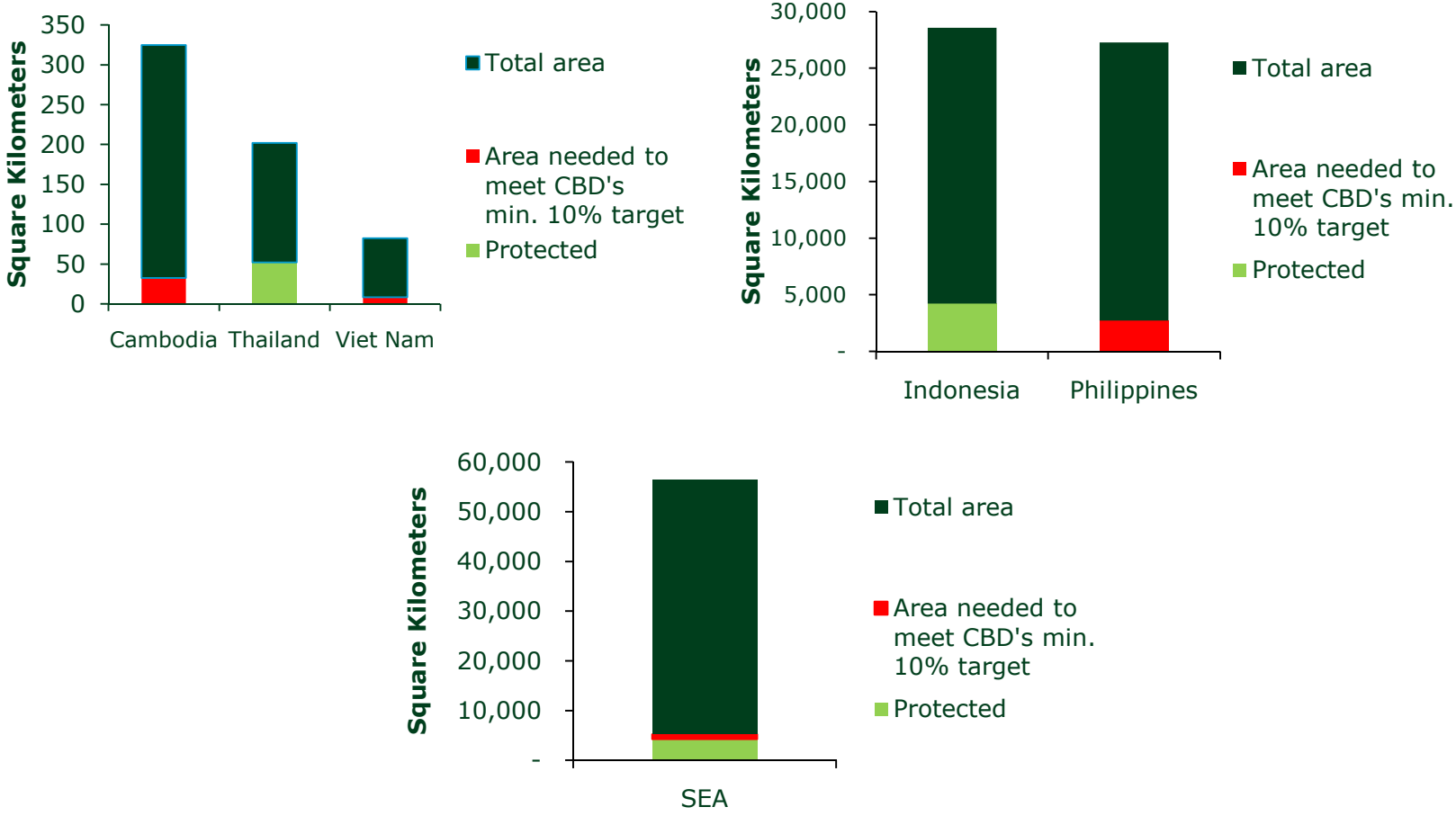
- *18 of the world's 60 seagrass species*
- *129 and 33 % of all seagrass areas on earth*
- *seagrass areas cover a range from 46,748 to 58,071 square kilometers*

Critical pressure points:

- *bottom-trawling*
- *extensive coastline destruction and modification*
- *decline in coastal water quality*
- *human-induced development*



10% Target for Seagrass Conservation in ASEAN was not met



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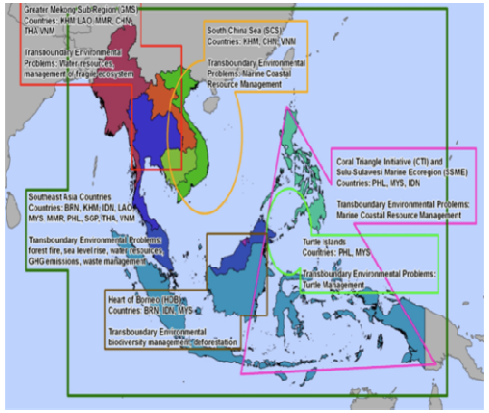
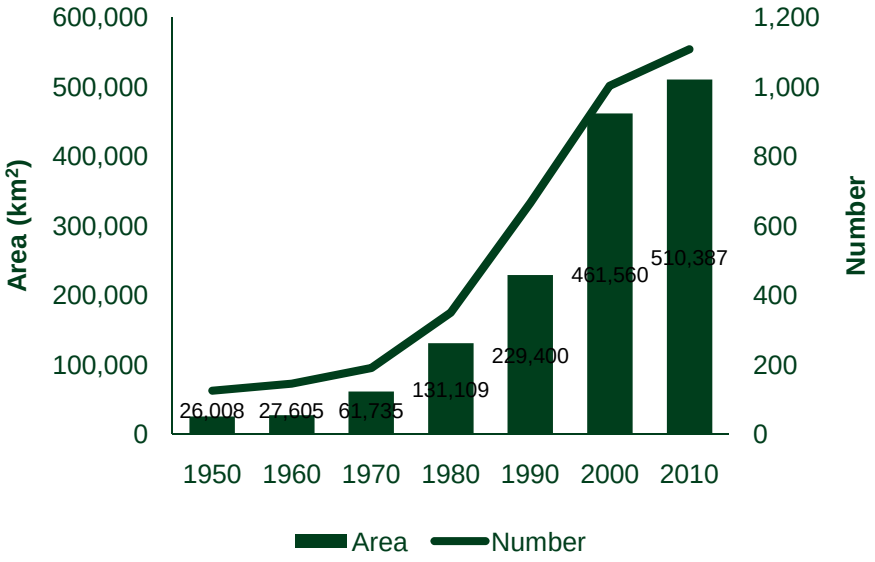


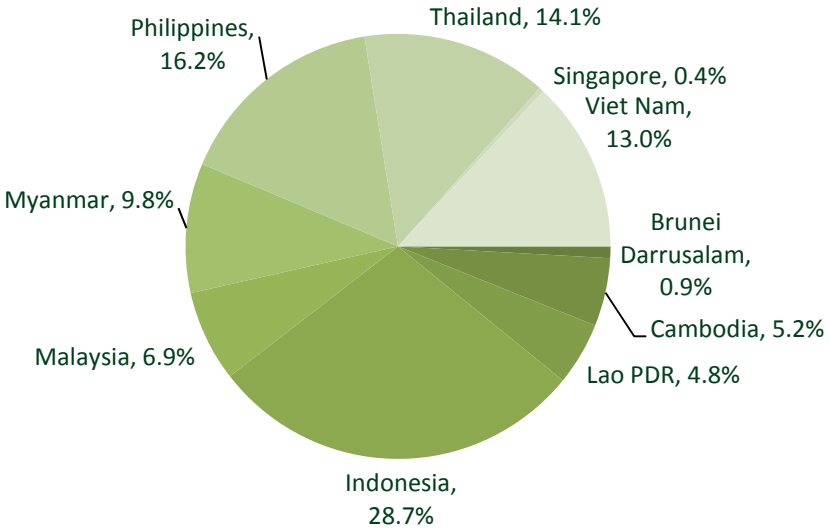
Responding to the Challenges of Biodiversity Conservation: The ASEAN Approach

Protected Areas: Conserving the last frontiers



Designated protected areas have increased by 98 per cent in terms of area, and by 89 per cent in terms of number

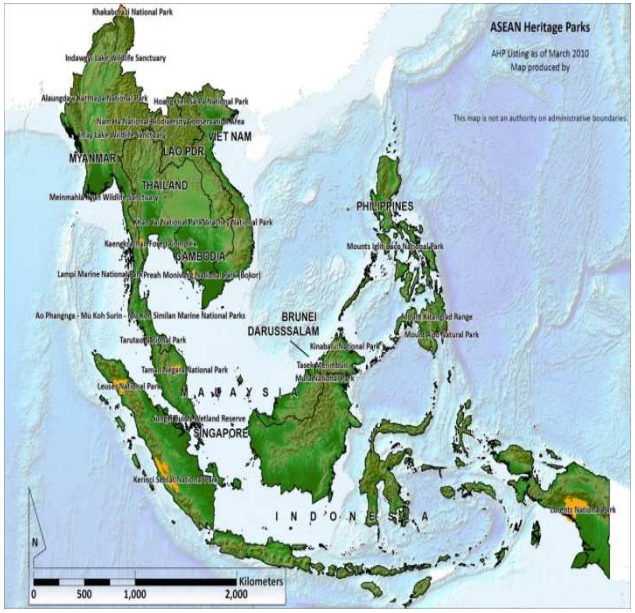
792 KBAs identified in the ASEAN region

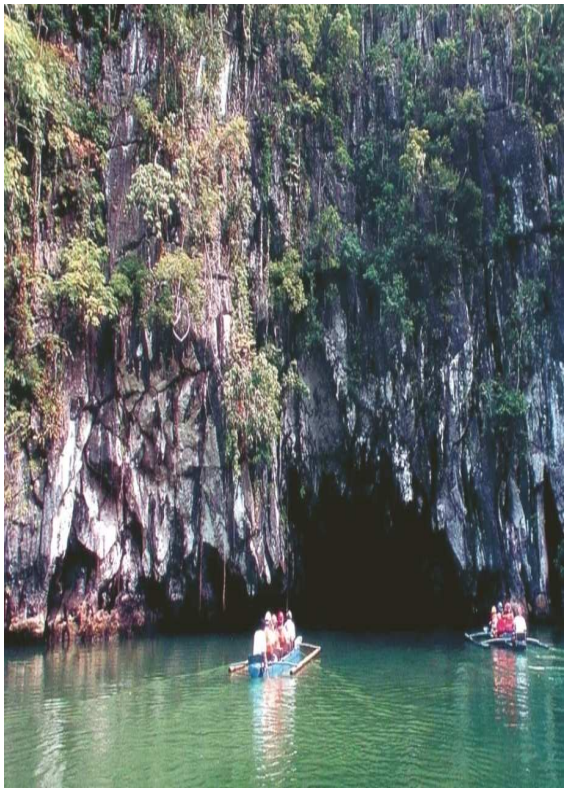


Establishment of Marine Protected Areas (MPAs) where vast marine resources exist

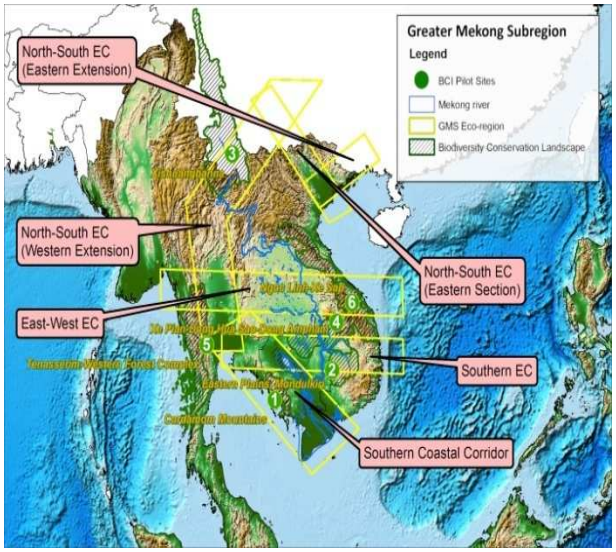
Protected Areas: Conserving the last Frontiers

- *Establishment of 28 ASEAN Heritage Parks*
- *The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security*
- *Sulu-Sulawesi Marine Ecoregion*
- *The Heart of Borneo Initiative*
- *Greater Mekong Subregion*





- ***Transboundary Protected Areas Initiative***
  - Transboundary Management in the Heart of Borneo
  - Turtle Islands Heritage Protected Area
  - Sulu-Sulawesi Marine Ecoregion
  - Transboundary Law Enforcement: ASEAN-WEN



ASEAN Wildlife Enforcement Network

- *World's largest wildlife enforcement network*
- *Integrated network of law enforcement agencies (CITES authorities, customs, police, prosecutors, specialized governmental wildlife-law enforcement organizations, and other relevant national law enforcement agencies)*

Building ASEAN's Capacity on Taxonomy

Taxonomic Capacity Building and Governance for the Conservation and Sustainable Use of Biodiversity Project

- *Aims to develop and enhance capacities in taxonomic knowledge for strengthening scientific bases in decision-making which are vital for environmental governance, business and technological developments.*

ASEAN Framework Agreement on Access and Benefit Sharing

- acknowledges the need to ensure the uniformity and consistency of regulations on access to genetic resources and its equitable benefit sharing in the ASEAN region
- recognizes that access to biological and genetic resources are currently unregulated – thus, the urgent need to protect ASEAN interests against biopiracy, as provided for in the CBD

Box 11. Lessons from the Philippines

A KEY PROBLEM in the ASEAN region is the absence of statutes that explicitly regulate bioprospecting which in effect allows collectors free access to genetic resources. For this reason, Philippine Executive Order 247[32] was adopted in 1995. It prescribes guidelines and procedures for bioprospecting in the Philippines. The regulation defines bioprospecting as the research, collection and utilization of biological and genetic resources for purposes of applying the knowledge derived therefrom for scientific/or commercial purposes. A Research Agreement between the Philippine Government and a prospective applicant is necessary for the conduct of bioprospecting activities. This may either be an Academic Research Agreement (ARA) or a Commercial Research Agreement (CRA), both requiring the prospective applicant to satisfy certain requirements and undergo an application process managed and enforced by the Inter-agency Committee on Biological and Genetic Resources. It also contains provisions on prior informed consent of indigenous and other local communities, which may be of value for other countries. The regulation is far from perfect. It had been questioned a number of times because of the tedious process involved before agreements are finally approved. Some local scientists and researchers found it to be a barrier to research and development.

The bioprospecting procedures were revised in 2001 through the Wildlife Resources Conservation and Protection Act. It amended the definition of bioprospecting to the research, collection and utilization of biological and genetic resources for the purpose of applying knowledge derived therefrom solely for commercial purposes[33]. The procedure for issuing a Commercial Research Agreement was streamlined, and now enables a more reasonable timeframe for approval. For scientific research activities, a separate procedure that is simpler and practical was adopted.

Implementing guidelines covering an access and benefit-sharing system, a quota for the collection of specimens, the determination of the amount of performance, an ecological and rehabilitation bond, and a monitoring scheme was drafted and presented to stakeholders for consultation[34].

Regarding intellectual property rights as this relates to species of plants and animals, the Philippines' Indigenous Peoples Rights Act provides that in relation to the right to indigenous knowledge systems and practices to develop their own sciences and technologies, the indigenous peoples are entitled to the recognition of the full ownership and control and protection of their cultural and intellectual rights. They shall also have the right of special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic resources: seeds, including derivatives of these resources: traditional medicines and health practices: vital medicinal plants, animals and minerals: indigenous knowledge systems and practices: knowledge of the properties of fauna and flora: oral traditions, literature, designs, visual and performing arts[35].

The Department of Environment and Natural Resources (DENR) laid down the basic policy (DENR Administrative Order No 2, 1993) on indigenous communities in relation to traditional knowledge and practices, which is to ensure the recognition of the customs and traditions of their ancestral domains and the importance of promoting indigenous ways in the sustainable management of natural resources, *i.e.*, their ecologically sound traditional practices. In furtherance of this policy, indigenous communities are to exercise general supervision and control over the management of their respective ancestral domains, including the resources found therein. For this purpose, the Council of Elders existing in the community is recognized as the decision-making and managing body.

No government programs under the control of the DENR are to be implemented within any ancestral domain without the written consent of the indigenous cultural community concerned, signed in its behalf by a majority of its recognized leaders. Such consent being given, ample opportunity to participate in the planning, implementation and maintenance of the program will be given to the community.

Management of the community by the indigenous cultural group excludes individuals who are not bona fide residents of the area from having a permit, license or other legal instruments to enter for the purpose of exploiting the resources therein without the collective consent in writing of the community expressed through public hearings and consultations with them.

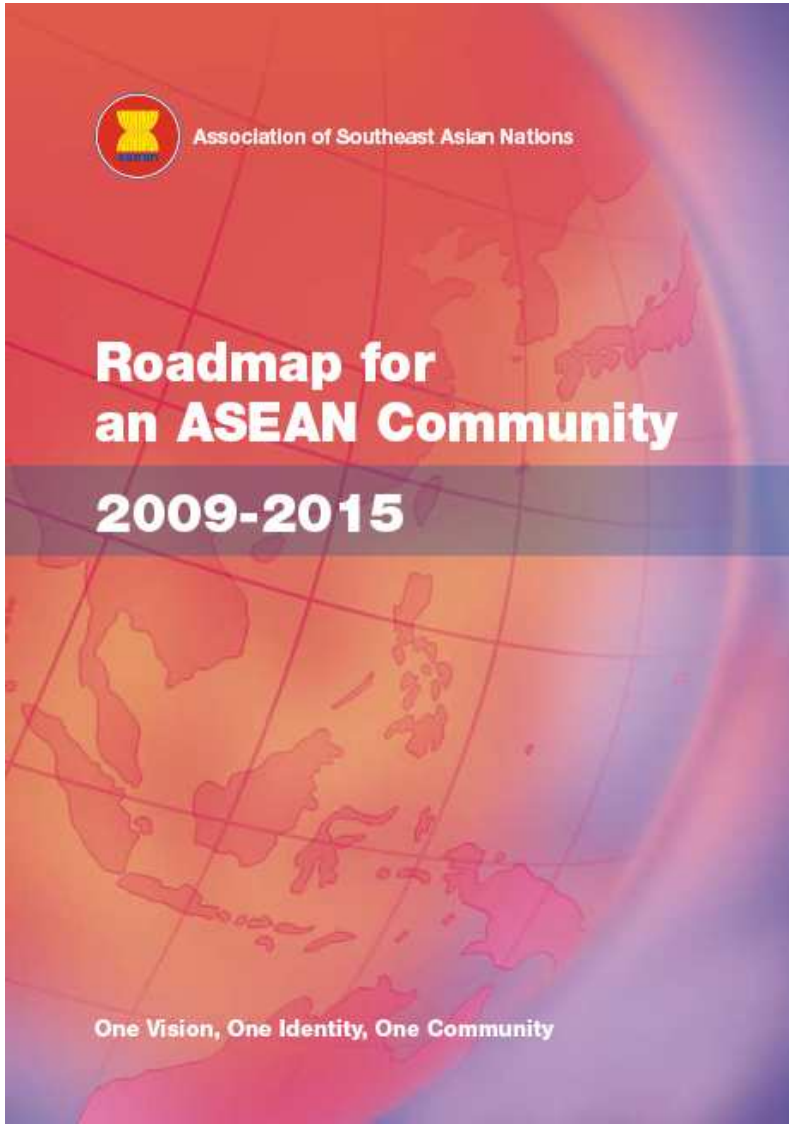
The DENR rules and regulations require the preparation of a comprehensive ancestral domain management plan by each indigenous community which shall take into consideration indigenous land use and a tenurial system including customary laws, beliefs and traditional practices, as well as issues relative to indigenous community participation in the protection, conservation, development and exploitation of natural resources in the area: protection and maintenance of indigenous community rights over livelihood resources: and provision of a supplemental source of livelihood: among others.

The ASEAN Socio-Cultural Community Blueprint: Ensuring environmental sustainability

Ensuring environmental sustainability while aggressively pursuing economic development for the benefit of present and future generations.

Roadmap for an ASEAN Community

- sustainable management and conservation of forest, soil, water, coastal and marine resources
- improvement of water and air quality
- active participation of the ASEAN to address global environmental issues such as climate change, ozone layer protection and the promotion of environmentally sound technologies



The ASEAN Centre for Biodiversity

Promoting the conservation and sustainable management of natural resources and biodiversity

Joint Research/ Initiatives on Biodiversity

- Supports worthy biodiversity research and policy initiatives from ASEAN-based research, academic, and both non-government and government institutions and agencies.

Course Programmes for Protected Area Workers

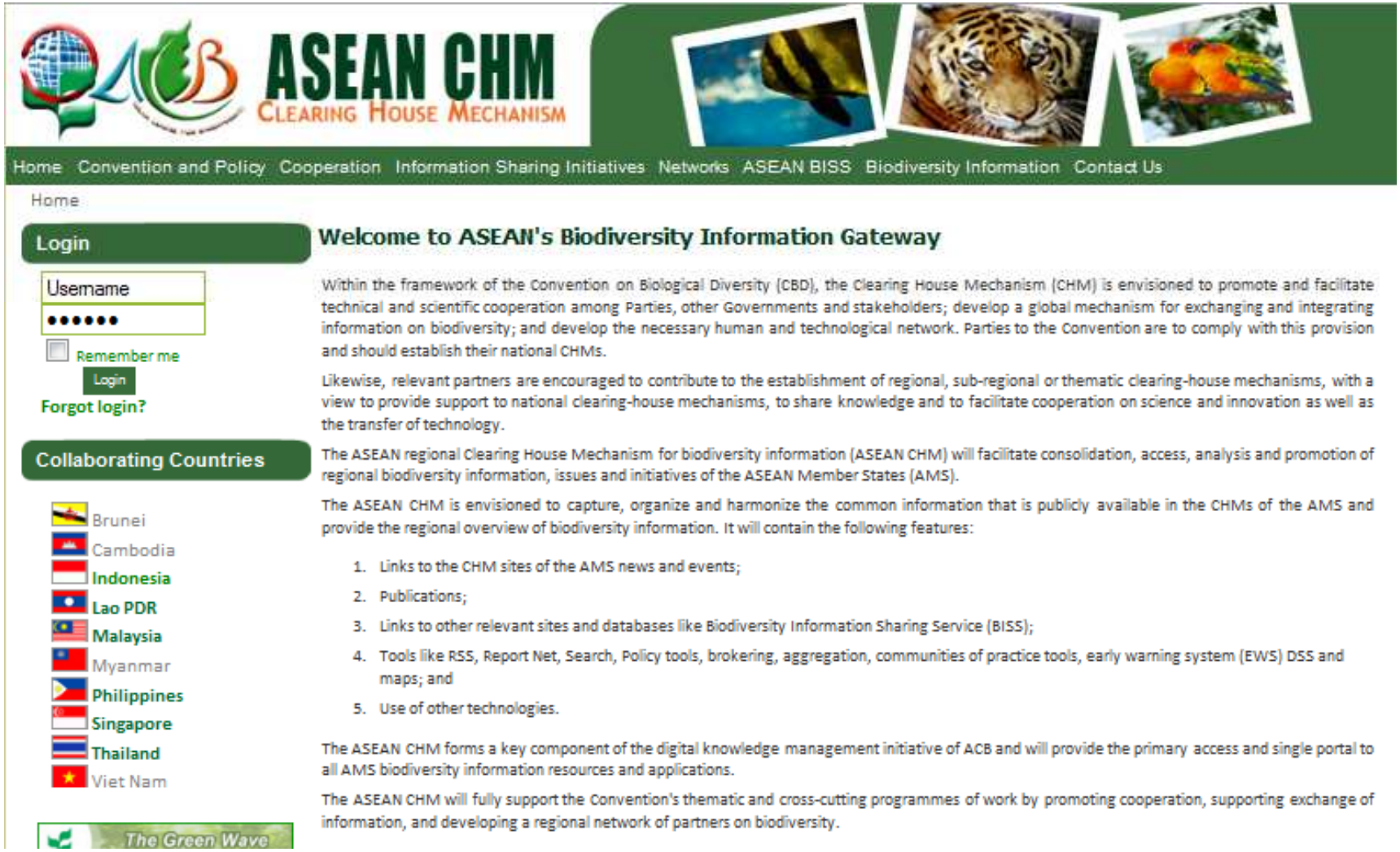
- Aims to enhance human capacities and institutional building initiatives in the region.

Biodiversity Information Sharing Service

A web-based information sharing platform for the ASEAN Member States on biodiversity information

Clearing House Mechanism for Southeast Asia

A single entry point to regional biodiversity information and the national CHM websites of the ASEAN Member States



Moving Forward
Learning from Lessons Past:
The ASEAN Experience

- **Sustaining current efforts on ecosystems approach to biodiversity conservation: capitalizing on political support to large regional programmes**

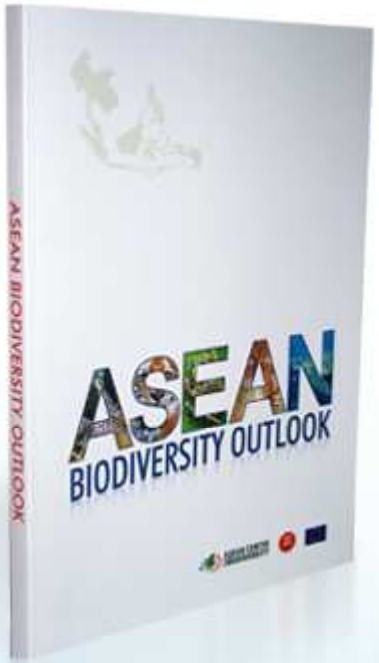
- **Taking pride on the natural and cultural heritage of the ASEAN Member States: sustaining the ASEAN Heritage Parks Programme**

- **Preaching to the unconverted: engaging a greater number of biodiversity stakeholders in conservation initiatives and mainstreaming biodiversity into sectoral development plans**

- **Valuing biodiversity and ecosystems services: translating biodiversity into economic terms**

- **Access and Benefit sharing: learning from global negotiations**
- **The business of biodiversity: engaging the private sector to invest in ecosystems services**
- **Championing biodiversity: communicating and educating society at large**

Find out more!



Visit our website:

http://www.aseanbiodiversity.org

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ASEAN CENTRE FOR BIODIVERSITY

Thank you !

ASEAN BIODIVERSITY OUTLOOK