

# Forest: Still an overdrawn natural resource

Photo by Ali Nazri Bin Ali Osman

ASEAN's forests have high species diversity and endemism, making them one of the world's critical habitats; and thus, highly important to global environmental sustainability and stability (ACB, 2010). However, the region's forest areas have been declining due to agricultural expansion; increased use of forest resources of a growing population; pressures due to increasing timber demand; illegal logging; forest encroachment for human settlement; infrastructure development, shifting, and slash and burn cultivation; and forest fires, among others. Reported forest contractions by the ASEAN Member States (AMS) were highly significant, losing as much as 30 to 45 percent of forest areas in the past four decades.

Under Target 5 of the Convention on Biological Diversity (CBD) Strategic Plan for Biodiversity 2011–2020, Parties, are obliged to reduce or mitigate the: 1) loss of forests (and other natural resources); 2) loss of habitats; and 3) degradation and fragmentation of forest ecosystems through sustainable management and conservation. The progress for Target 5 is assessed on the following indicators (SCBD, 2014):


- Rate of loss of forests is at least halved and, where feasible, brought to zero.
- Loss of all habitats is at least halved and, where feasible, brought close to zero.
- Degradation and fragmentation of forest ecosystems are significantly reduced.



Target 5 recognizes the forest as one of the important natural habitats whose loss must be abated or mitigated through “improvements in production efficiency and land use planning and enhanced mechanism for natural resource governance” (CBD, 2016).

The ASEAN Biodiversity Outlook 2 (ABO 2) reported that the rate of forest loss from 2000 to 2010 registered an average annual rate of 1.2 percent. However, significant reforestation efforts by AMS have caused this rate to decline to 0.26 percent per year in the last five years (2010–2015). Despite this notable improvement, this decline will translate to 5,261.62 square kilometers of forest area loss per year if threats such as habitat fragmentation, clearing for agriculture, encroachment and other illegal forest activities continue.

AMS must exert more effort in reducing habitat loss and forest degradation and fragmentation to protect the habitats of key species (e.g., orangutans, rhinoceros, elephants, tigers, and others). To effect change, AMS need to stop or abate factors that directly affect these indicators such as the conversion of forest for high-value plantation crops particularly oil palm and rubber, illegal logging, and forest encroachment, among others. Programs on restoration of forest habitats (rehabilitation) and reforestation need to be more focused to ensure that priority areas are targeted.



The ASEAN region has the highest mean proportion of country-endemic bird (9 percent) and mammal species (11 percent), and the second highest proportion of country-endemic vascular plant species (25 percent) compared to the other tropical regions of the world (Sodhi et al., 2010).

The establishment of ecological links such as Malaysia's Central Forest Spine, Greater Mekong Subregion Biodiversity Corridors Initiative (GMS-BCI), and transboundary initiatives such as the Heart of Borneo Initiative of Brunei Darussalam, Malaysia, and Indonesia, could be effective solutions to habitat loss and fragmentation.

**It is predicted that 13–42 percent of ASEAN's forest plant and animal species will be lost by 2100 owing to the loss of about 70–90 percent of habitats (Sodhi et al., 2010). Mega diverse countries including the Philippines, are the more vulnerable countries, as these also reported the greater proportions of forest cover loss over the years.**

## **Call for Action**

Taking the above points into account, the following suggestions can be considered to move forward.

### ***Establish an ASEAN Forestry Masterplan***

ASEAN integration is an opportunity to unify actions on forest management and effect a holistic planning approach to address the requirements of forest sectors in each AMS while guided by regional forests management targets. A multi-sectoral planning process with representation from forestry, agriculture, environment, economic sector, climate change, indigenous peoples and local communities

(IPLCs), is recommended. The ASEAN technical working groups and experts of these sectors can collaborate to develop regional forestry laws, innovative forest management approaches, forestry targets, foster synergies, share resources whenever possible, and develop common indicators for forest monitoring and evaluation.

### ***Foster a green economy***

The ASEAN Integration will guide economic advancement that takes into account socio-political development and equitable sharing of benefits in the use of forest resources. Recommended strategies are:

- Support the regional implementation of the UN Reducing Emissions from Deforestation and Forest Degradation (REDD+) Programme.
- Implement and integrate economic valuation and Payment for Ecosystem Services (PES) into national accounting systems to reflect economic benefits from carbon sequestration, water provisioning, and nutrient cycling, among others.
- Integrate PES into national economic indicators (e.g., gross domestic product and gross national product) to indicate actual benefits from the forests.
- Develop, implement, and promote an ASEAN branding and labelling system for forest products derived from sustainably managed forests.
- Develop a Communication, Education and Public Awareness (CEPA) program to raise awareness on the importance of consumer and industrial products that come from sustainably managed forests.

### ***Promote the establishment of ecological or green corridors***

The Central Forest Spine (CFS) Masterplan of Malaysia links four major forest complexes through





Photo by Ali Nazri Bin Ali Osman

a network of corridors to create one contiguous wildlife sanctuary to allow movement of wildlife and genetic resources, and for ecological functions to flourish. Initiatives such as this should be implemented whenever possible to connect and manage fragmented forest areas across boundaries.

### ***Avoid cutting old-growth forests***

The remaining primary forest is the region's last remaining frontier for tropical richness and should be conserved for future generations. Loss of the primary forest will cause further loss of important habitats that house diverse species in the region and the benefits of the ecosystem services they provide.

### ***Reduce forest encroachment***

Community forest resource development can reduce forest encroachment as it generates income and other benefits for communities on a sustainable basis. It bestows rights to communities to develop the land for income-generating endeavors.

### ***Conduct landscape restoration and ecological and spatial principles in reforestation and rehabilitation programs***

Reforestation and forest restoration activities should take priority over wood production. Schemes implemented should take into consideration enhancement or improvement of ecological functions and ecosystem services of areas under restoration/reforestation. Further, forest restoration must consider a full landscape that includes forests and other lands beyond forest reserves to effect multiple benefits.

Reforestation should be more focused on planting native tree species to maintain local landscape heritage and nature conservation value. Further,

these native trees are more likely to thrive and produce more sustainable economic benefits. Rehabilitation programs implemented should include attributes for ecological and socio-economic soundness.

### ***Revisit protected areas program implementation***

The implementation of the protected areas program in the region should be revisited and assessed in terms of its management effectiveness through the Management Effectiveness Tracking Tool (METT) to establish more appropriate conservation measures. Further, identification of additional protected areas should apply a more scientific method through the key biodiversity areas (KBAs) approach, which takes into consideration, among others, the vulnerability and conservation needs of endemic and threatened species in these areas.

### ***References***

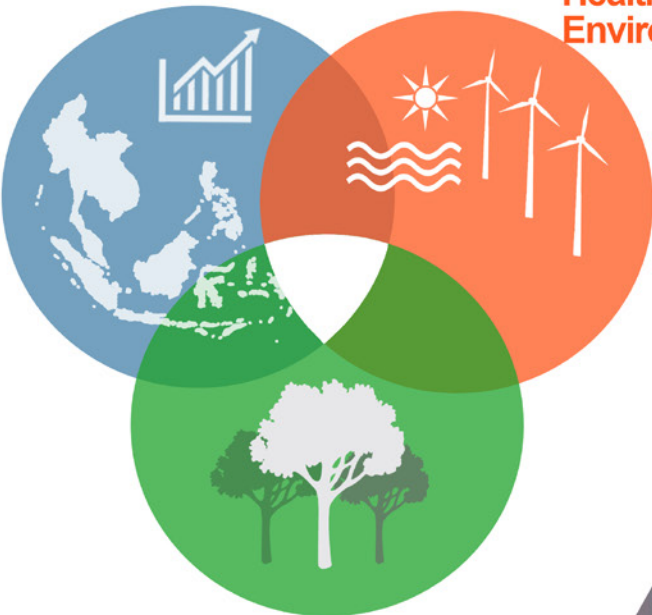
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One ASEAN  
community  
progressing  
in harmony  
with nature



Healthy  
Environment

Forest Vitality

## Ways Forward

ASEAN  
Forestry Master  
Plan



Protection of old  
growth forests

Landscape  
restoration and  
ecological and spatial  
principles in  
reforestation and  
rehabilitation  
programs



Reduction in  
forest  
encroachment



Green  
economy

Effective  
protected area  
programs



Forest certification  
and labelling



Reducing Emissions from  
Deforestation and  
Forest Degradation,  
The Bonn Challenge,  
and pledges on  
restoration

Ecological  
and green  
corridors



## Status and Trends



Increasing demand  
for wood, fuel,  
and paper  
products

Infrastructure  
development  
and forest  
encroachment



Agricultural  
expansion and  
plantation  
establishment



0.7% decrease in  
ASEAN's forest  
cover per year  
from 2000–2015

Forest  
fragmentation  
and habitat loss



By 2100,  
70%–90% loss  
in habitat area



By 2100,  
13%–42% loss  
of ASEAN species

