



ambition for biodiversity

BIODEV
2030

In cooperation
to facilitate
biodiversity
engagement



IMPLEMENTATION IN VIET NAM



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BIODIVERSITY DECLINE IN VIET NAM

POLICY BRIEF

INTRODUCTION

Biodiversity plays vital roles in many aspects of the society, including economic development. The loss of biodiversity is associated with the direct loss of species, ecosystems and its vital services for human and other species. The alarming loss of biodiversity has led to global commitments to protect biodiversity e.g., Aichi Biodiversity Target and the 2011-2020 strategic plan of the Convention on Biological Diversity. However, these targets of the last decade were not achieved. To tackle such loss, the ambitious "Biodiversity engagement facilitation" Initiative (BIODEV2030), financially supported by AFD (French Development Agency) and coordinated by Expertise France was initiated in early 2020. The Initiative has been implemented in sixteen pilot countries, including Viet Nam where the World Wide Fund for Nature in Viet Nam (WWF-Viet Nam) is the implementing organization with its partner - the Nature and Biodiversity Conservation Agency (BCA).

This policy brief is developed as part of the BIODEV2030 Initiative. The policy brief is based on the results of the assessment of the biodiversity loss in Viet Nam with a view to national dialogues towards the post-2020 Global Biodiversity Framework. It summarizes Viet Nam's main biodiversity characteristics, the biodiversity-related policies, the main national institutions being in charge of biodiversity issues, the two economic sectors having the great negative impacts on biodiversity and their commitments.



Disclaimer: The views expressed in this Policy Brief are those of the authors and do not necessarily reflect the views of the Nature and Biodiversity Conservation Agency (BCA) and the World Wide Fund for Nature in Viet Nam (WWF-Viet Nam). This publication serves as a reference for management agencies and organizations involved in biodiversity conservation including BCA and WWF-Viet Nam, and is considered for the development of appropriate policies and regulations on biodiversity conservation in the coming time

VIET NAM IS GLOBALLY RECOGNIZED FOR A HIGH LEVEL OF BIODIVERSITY



Viet Nam's biodiversity at both the ecosystem and species levels is remarkable. At least 21 out of 25 of the world biomes (84.0%) and 60 out of 108 of the world ecosystem functional groups (55.5%) were identified in Viet Nam [3]. Tropical and subtropical forests are the most extensive terrestrial biome, while wetlands and marine ecosystems commonly occur across the country [3].

A total of

20,000 terrestrial & water plants

10,500 terrestrial animals

2,000 invertebrates & freshwater fish

11,000 marine species

were identified in Viet Nam [2]. Since new species have been continuously discovered, the actual number of species in Viet Nam should well exceed these estimated numbers [3]. The country is globally known for being home to many endemic species e.g., 19% of the 753 known orchid species is endemic [3].

Biodiversity in Viet Nam has been recognized at international level with 6/238 priority ecoregions, nine (9) RAMSAR sites (120,549 ha), nine (9) biosphere reserves (4,380,504 ha), three (3) natural world heritage sites (399,033 ha, including the buffer zone), 10 ASEAN heritage parks (365,389 ha), 63 Important Bird Areas (IBA), and 122 Key Biodiversity Areas (KBA) (3,879,600 ha) [3].

VIET NAM HAS BUILT INSTITUTIONS AND DEVELOPED A WIDE RANGE OF POLICIES FOR BIODIVERSITY CONSERVATION, YET THE EFFICIENCY REMAINS A QUESTION



The Ministry of Natural Resources and Environment (MONRE) and its associated government bodies, e.g., Vietnam Environment

Administration (VEA), Nature and Biodiversity Conservation Agency (BCA) are responsible for the public management of biodiversity [3]. Other ministries and governmental agencies also have mandates to conserve biodiversity, e.g., Ministry of Agriculture and Rural Development (including its associated bodies: Viet Nam CITES Management Authority, Forest Protection Department, Directorate of Fishery, Vietnam Forest Protection and Development Fund), Ministry of Industry and Trade, Ministry of Science and Technology, Ministry of Finance, Ministry of Planning and Investment, Vietnam Environment Protection Fund and other institutions [3].



In recognition of the importance of biodiversity, Viet Nam has participated in nearly 10 international environmental agreements since the late 1980s [3].

During the 1980s-2000s, the government had issued and revised many laws and policies related to biodiversity. These laws and policies have set the first steps for biodiversity conservation with significant achievements e.g., the classification of three types of forests, the establishment of a system of protected areas, national forest restoration program, and many policies to improve livelihoods of local people.



However, regulations specifically developed for biodiversity conservation were largely absent, instead of biodiversity was generally assumed as one of the environmental aspects in

the laws [1]. The keyword “biodiversity” was not even mentioned in 7/13 related and important laws during the period spreading between 2003-2014 [1]. The Investment Law (2014) for the first time required a report of preliminary environmental impact assessment (EIA) to be included in the application for the Prime Minister for approving new investment projects. Only from the Investment Law issued in 2021, EIA has been officially required for approval of new investment

projects by authorized organizations. However, EIA has not been strictly enforced and considered as a decisive tool to select investment project and for environmental management of projects [1].



It is only in 2008 that the first law on biodiversity was issued, to specifically regulate biodiversity-related matters and specify responsibilities for biodiversity conservation. This law has united all biodiversity-related matters and specified many problems as well as mainstreamed many international environmental agreements related to biodiversity. However, some aspects of the Law on Biodiversity 2008 remained incompatible or overlapping with the other laws (e.g, law on forest protection and development, law on fishery) [1]. In addition, regulations on environmental tax, violations etc. remain absent or poorly described in the Law on Biodiversity 2008. During the period 2010-2020, the government has revised nearly 10 other laws related to biodiversity [3] and decrees, decisions, circulars guiding the implementation of these laws are being developed. The impacts and the roles of these laws on biodiversity conservation remained to be assessed.



Those are problems related to Laws and related documents. Besides, the implementation of many economic development policies might have been an important indirect driver of forest and biodiversity loss. In the past two-three decades, many policies at the central and local levels have been issued to promote the economic development. For example, policies were issued to promote the expansion of rubber plantations and shrimp farming areas to meet exporting demands.

However, the weak enforcement of these policies with the lack of monitoring, has associated with the conversion of large areas of forested land in the Central Highlands to rubber plantations and mangrove forests in the Southern provinces to shrimp farming areas.



It is evident that the state management of biodiversity is spread across different ministries and regulated by many laws resulting in scattered management, overlapping and ineffectiveness [3]. Similarly, planning is spread across economic sectors, resulting in fragmentation of lands and natural resources [3]. Management of biodiversity and natural resources is concentrated at the central level with lacks focus and weak enforcement at the sub-national level (e.g., province and district levels) [3]. Strategy and action plans for biodiversity conservation at local levels vary without mechanisms to share lessons learnt [2]. Financing for biodiversity conservation is not focused, prioritised, specified and without budget code for Protected Areas system as well as specific investment plan for biodiversity in the government’s investment programs for period 2016-2020 [2]. Overall planning on land and plans of different economic sectors lack the integration of biodiversity conservation [2]. In addition, there is a lack of the active participation of the private sectors, civil societies and local communities in decision making process, coordination and investment in biodiversity conservation [2].

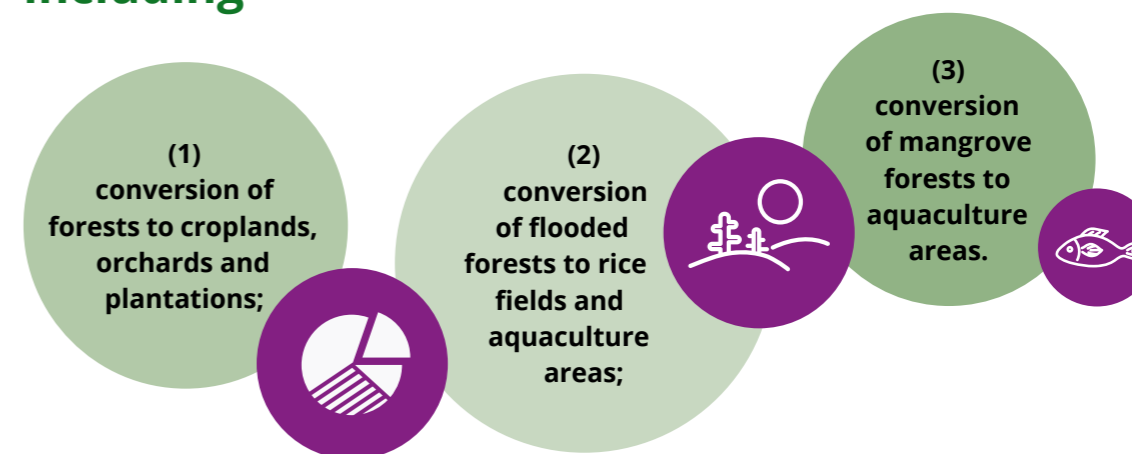
BIODIVERSITY IS UNDER MULTIPLE THREATS AND AQUACULTURE AND FORESTRY ARE IDENTIFIED AS TWO SECTORS WITH GREAT IMPACTS

Meanwhile, both ecosystem and species diversity have faced with multiple threats. In 2021, more than 11% of the species in Viet Nam assessed by the IUCN were classified as threatened¹. Literature review consistently suggested that biological resource use, agriculture and aquaculture, nature system modifications, infrastructure development, residential and commercial development were the main threats to biodiversity at the ecosystem and species levels [3].

However, having a full understanding of the magnitude of every threat to species and ecosystems is challenging due to the lack of available and reliable data. Besides, no exhaustive quantitative analysis of the relationship between biodiversity and threats have been released so far.



Using remote sensing and STAR¹ analyses as two quantitative tools, Oréade-Brèche, 2021 identified key threats to biodiversity at the ecosystem and species levels. The remote sensing analysis of the land cover and land use change over 18 years (2000-2018) revealed that **the most severe threats to the ecosystem level, including**



The STAR analysis performed on 181 threatened species belonging to mammals, birds and amphibians taxa revealed factors pushing threatened species to extinction : (1) annual and perennial non-timber crops; (2) logging and wood harvesting; (3) hunting and collecting terrestrial animals came out of the analysis.

In terms of economic sectors, agriculture and forestry have been identified as being the most impacting ones on biodiversity [3]. The most prominent impacts of these sectors on biodiversity is the conversion of forest (including tropical forest, flooded forest, wetland and mangrove forests) to other land uses, e.g., rubber plantations, cassava fields, aquaculture, infrastructure, etc. During 1975-1990, 2.8 million hectares of natural forests were lost and another 2.78 million hectares were lost during 2000-2018 [3]. The area of rubber plantations increased from 483,000 ha to 942,000 ha (between 2005-2019) with the majority resulting from the conversion of natural forests [3]. Similarly, monoculture plantations increased from 1.92 M ha to 4.39 M ha (between 2002-2020) and during 2000-2018, 140,864 ha of flooded forest were converted to other land uses [3].

Forest conversion to intensive agricultural areas and plantations has resulted in fragmentation and the loss of habitats. In addition, intensive and unsustainable agriculture and forestry practices does not promote biodiversity and potentially cause a range of consequences (e.g., pollution, fire risks, increasing human intrusion to adjacent forest areas). Forest conversion has pushed many tree species to vulnerability, e.g., *Dipterocarpus hasseltii* (EN in the IUCN Red List) and *Glyptostrobus pensilis* (CR in the IUCN Red List) [3].

¹ Threatened species encompass species classified as Critically Endangered (CR), Endangered (EN) and Vulnerable (VU)

¹ STAR - Species Threat Abatement and Restoration metrics designed by the IUCN

COMMITMENTS OF AGRICULTURE AND FORESTRY SECTORS ON BIODIVERSITY CONSERVATION

The commitments for biodiversity conservation were paid attention to at both the state and the economic sector levels.

At the state level, the government issues and enforces policies related to biodiversity and allocates a budget for biodiversity conservation.

Some highlighted commitments of the **forestry sectors** included: (i) protect and sustainable development and use of 16.24 million ha of land planned for forestry, especially existing natural forests. The Prime Minister also directed the local government of the Central Highlands to strictly prohibit the conversion of 2.25 M ha of natural forests; (ii) to ensure the broad participation of economic sectors and social organizations in forestry development; (iii) to sustainably manage 100% of forest areas of forest owners by 2030; (iv) to improve quality of natural forests and the efficiency of biodiversity conservation in protected areas; (v) to minimize violations of forestry law, stop the exploitation of timber of natural forests nationwide and strictly control the processing and trading of timber to prevent the illegal consumption and use; (vi) to minimize conversion of natural forest use purposes to non-forestry purposes; (vii) to strengthen and develop special-use forests system, conserve and promote the value of forest tree genetic resources, forest resources and biodiversity [3].

Agriculture sector committed to (i) stabilize the areas of cassava, rubber at 450,000 ha and 800,000 ha, respectively, while maintaining the productivity; (ii) strictly control the conversion of natural forest; (iii) promote the sustainable forest management and forest certification [3].



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RECOMMENDATIONS TO ADDRESS THE DECLINE OF BIODIVERSITY

Numerous recommendations could be listed to address the biodiversity loss by the economic sectors due to the wide diversity of the stakeholders impacting directly and indirectly species and ecosystems. However, no study having comprehensively identified and quantified every single biodiversity economic sectors' impacts, a selection of ten recommendations is provided hereinafter, based on the outcomes from this assignment.

#1 The most prominent threats from the economic sectors to biodiversity is land use conversion. Therefore, it is critical to enforce sustainable land use planning policies as well as concrete policies and law enforcement to strictly control forest land conversion. This requires EIA to be strictly enforced in all stages from the assessment itself, consultation, appraisal and making decision for approval to the project implementation of the project owner after being approved. As such, it is required to have a much better understanding of biodiversity and biodiversity threats to provide more detailed guidelines, requirements and criteria on biodiversity assessment in EIA [1]. Similarly, biodiversity assessment must be strictly implemented and the results must be carefully considered in Strategic Environmental Assessment (SEA). Capacity building in EIA should also be developed to better conduct the assessment. Future policies to promote economic development should be deliberately developed and take into account environmental and biodiversity consequences and strictly and effectively enforced.

#2 For areas already being converted to intensive agriculture, aquaculture and monoculture plantations, it is strongly recommended to have policies that promote sustainable management practices e.g., sustainable agriculture, integrated landscape management, sustainable management certifications to improve sustainable biodiversity management and reduce environmental impacts.

#3 Regulations on biodiversity conservation should be specifically targeted, yet they remain absent in many laws e.g., Law on Land (2013), Mineral Law (2010), Law on Enterprise (2020), Investment Law (2021), Public Investment Law (2019), Construction Law (2020) and Law on Credit Institutions (2010). More policy documents related to these laws should be issued to integrate biodiversity stakes and regulate biodiversity conservation.

#4 Planning for biodiversity conservation for 2021-2030 with a vision to 2050 needs to address weak points of the previous planning period e.g., the integration, compatibility with the planning of other sectors.

#5 Impacts of economic sectors on biodiversity need to be systematically monitored and documented to regulate appropriate commitments and activities of the economic sectors over biodiversity. Impact indicators should be used for monitoring the economic sectors. Remote sensing tools and STAR metrics are examples of indicators.

#6 Biodiversity conservation should be mainstreamed in policies of all government levels and more concrete commitments on biodiversity conservation should be seen in the related policies of economic sectors.

#7 There should be policies to promote the participation of the private sectors, civil society organizations, and local communities in biodiversity conservation.

#8 There is a need to have better coordination on biodiversity conservation among organizations of the central government and lower level management organizations.

#9 Biodiversity conservation should be clearly integrated in strategy and development plans of the private sectors.

#10 More biodiversity related incentives and more financial investments tools should be mobilized for farmers, fishermen, forest managers, and more broadly for the private sector to ensure a smooth transition from the current business model towards biodiversity-friendly business model.

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