Viet Nam

The Biodiversity Finance Initiative (BIOFIN)

Finance for Nature

BIODIVERSITY FINANCE PLAN

Hanoi, August 2019

This project is co-funded by the European Union

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

NORWEGIAN MINISTRY OF FOREIGN AFFAIRS

Flanders State of the Art

TABLE OF CONTENTS

LIST OF FIGURES **3**

LIST OF TABLES **3**

LIST OF BOXES **3**

ABBREVIATIONS AND ACRONYMS **4**

ACKNOWLEDGEMENTS **5**

EXECUTIVE SUMMARY **6**

1 INTRODUCTION **9**

1.1 Overview 9
1.2 Legal and Policy Framework of Biodiversity Conservation 10
1.3 Global Biodiversity Finance Initiative 12
1.4 The Viet Nam National Biodiversity Strategy 13

2 METHODS OF BIODIVERSITY FINANCE PLANNING **16**

2.1 Biodiversity Finance Plan Process 16
2.2 Key Findings of the PIR, BER, and FNA Reports as Basis for the BFP 20

3 BIODIVERSITY FINANCE PLAN **23**

3.1 Objectives 23
3.2 Limitations 24
3.3 Finance Solutions 25
3.2.1 Type 1: Solutions That Generate Revenues 25
Solution 1.1 Generate revenue from sustainable tourism and collect service fees in PAs 25
Solution 1.2 Expand payment for ecosystem services to MPAs 32
Solution 1.3 Promote public-private partnerships in biodiversity conservation 36
Solution 1.4 Increase ODA financing for biodiversity conservation 39
3.2.2 Type 2: Solutions That Avoid Future Biodiversity Expenditures 42
Solution 2.1 Promote biodiversity offset mechanisms 42
3.2.3 Type 3: Solutions That Deliver Financial Resources More Effectively and Efficiently 47
Solution 3.1 Apply an environmental accounting system 47
Solution 3.2 Add a state budget index code for biodiversity conservation 51
Solution 3.3 Adopt results-based budgeting 56
3.4 Implementation Timeline of the BFP 62

4 CONCLUSIONS **67**

REFERENCES **68**

APPENDICES **69**

Appendix 1 Criteria used to screen priority financial solutions 70

LIST OF FIGURES

Figure 1 Overview of the Viet Nam national BIOFIN process 16
Figure 2 Overview of approach for the development of the Viet Nam Biodiversity Finance Plan 16

LIST OF TABLES

Table 1 Preliminary identified finance solutions for strengthening biodiversity finance in Viet Nam 18
Table 2 Finance solutions selected for inclusion in the Biodiversity Finance Plan 24
Table 3 Potential for development of typical ecotourism product groups of some NPs and PAs 27
Table 4 Estimation of revenue from tourist entrance fee at Hon Cau MPA 30

LIST OF BOXES

Box 1 Current state of sustainable tourism development and revenues at NPs and PAs 29
Box 2 Designing and implementing a tourism fee system for MPAs, starting with Hon Cau MPA 30
Box 3 Development of procedures and standardized costs for RBB and biodiversity monitoring and reporting in PAs in Viet Nam 57

ABBREVIATIONS AND ACRONYMS

ADB	Asia Development Bank
AFD	Agence Française de Développement
APAP	Asian Protected Areas Partnership
ASEAN	Association of Southeast Asian Nations
BAU	Business-as-usual
BER	Biodiversity Expenditure Review
BFP	Biodiversity Finance Plan
BIOFIN	Biodiversity Finance Initiative
BMP	Biodiversity Master Plan
CBD	Convention on Biological Diversity
CEPF	Critical Ecosystem Partnership Funds
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EAAFP	East Asian – Australasian Flyway Partnership
EIA	Environmental Impact Assessment
EU	European Union
EVN	Viet Nam Electricity
FCPF	Forestry Carbon Partnership Fund
FFI	Fauna & Flora International
FPDF	Forest Protection and Development Fund
FNA	Biodiversity Financial Needs Assessment
FREL	Forest Reference Emission Level
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Fund
GHG	Greenhouse gas
GSO	General Statistics Office
IBA	Important Bird and Biodiversity Area
IFC	International Finance Corporation
IMF	International Monetary Fund
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IUCN	International Union for the Conservation of Nature
JICA	Japan International Cooperation Agency
MARD	Ministry of Agriculture and Rural Development
MEA	Millennium Ecosystem Assessment
MoF	Ministry of Finance
MoH	Ministry of Health
MoIT	Ministry of Industry and Trade
MOLISA	Ministry of Labors, Invalids and Social Affairs
MoNRE	Ministry of Natural Resources and Environment
MoST	Ministry of Science and Technology
MPA	Marine Protected Area
MPI	Ministry of Planning and Investment
NA	National Assembly
NBS	National Biodiversity Strategy
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Governmental Organization
NP	National Park
NBSAP	National Biodiversity Strategy and Action Plan
NR	Nature Reserve
NSGG	National Strategy on Green Growth
NTFP	Non-Timber Forest Product
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PA	Protected Area
PES	Payment for Environment/Ecosystem Services
PFES	Payments for Forest Environmental Services
PIR	Policy and Institutional Review
PM	Prime Minister
PMES	Payments for Marine Ecosystem Services
PPC	Provincial People's Committee
PPP	Public-Private Partnership
QH	Quốc hội (National Assembly)
RBB	Results-Based Budgeting
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SDG	Sustainable Development Goal
SEA	Strategic Environmental Assessment
SEEA	System of Environmental Economic Accounting
SNA	System of National Accounts
SP-RCC	Support Program to Respond to Climate Change
TFF	Trust Fund for Forests
TF	Trust Fund
TG	Technical Group
TTG	Thủ tướng (Prime Minister)
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNWTO	United Nation World Tourism Organization Network
VDPF	Viet Nam Development Partnership Forum
VEA	Viet Nam Environment Administration
VEPF	Viet Nam Environmental Protection Fund
VNFOREST	Viet Nam Administration of Forestry
WB	World Bank
WWF	World Wide Fund for Nature

ACKNOWLEDGEMENTS

The **Biodiversity Finance Plan** (BFP) was developed for the Biodiversity Finance Initiative project managed by UNDP. The Viet Nam BFP is the outcome product of the cooperation between UNDP Viet Nam and the Nature and Biodiversity Conservation Agency, Viet Nam Environment Administration under the Ministry of Natural Resources and Environment, and the Ministry of Finance of Viet Nam.

The completion of this project could not have been accomplished without the support of the Viet Nam BIOFIN team, especially Ms. Bui Hoa Binh (UNDP coordinator), Ms. Le Thu Hoa (team leader), Mr. Harald Leummens (UNDP technical expert), and Ms. Annabelle C. Trinidad and Ms. Jessica Alvsilver (global BIOFIN team).

The report could not have been possible without the contributions and collaboration of the managers and staff of the Protected Areas including Ba Vi National Park, Cuc Phuong National Park, Son Tra Nature Reserve, Phu My Species Conservation Area, and Sao La Species Conservation Area, all of whom were enthusiastic in sharing their experience with the management of their Protected Areas and discussing the possible financial solutions in the context of Viet Nam.

We cannot express enough thanks to the Nature and Biodiversity Conservation Agency, especially Ms. Hoang Thi Thanh Nhan (Deputy Director) and Ms. Tran Huyen Trang, for their continued support, hosting the advisory conferences, and providing valuable comments to draft versions of this BFP.

Finally, we would like to express our sincere gratitude to experts working in different departments of the Ministry of Natural Resources and Environment, Ministry of Agriculture and Rural Development, Ministry of Finance, and Ministry of Planning and Investment for their valuable comments to draft versions of this BFP.

Ms. Hoang Thi Thuy Nguyet, lead author

EXECUTIVE SUMMARY

The Biodiversity Finance Plan outlines a series of priority finance solutions, selected through a consultative process based on their finance potential, biodiversity impact, and feasibility as primary selection criteria. It is based on diagnostics gathered through preceding studies of Viet Nam's policy and institutional context for biodiversity finance, biodiversity relevance of all sectors, and the existing financial needs of the country for biodiversity conservation.

Viet Nam has selected 8 biodiversity finance solutions to address the existing financing needs, grouped under 3 types:

TYPE 1: SOLUTIONS THAT GENERATE REVENUES

Finance Solution 1.1: Promote sustainable tourism and collect service fees in Protected Areas. This solution focuses on measures to develop sustainable tourism, emphasizing the participation and coordination of all groups engaged in tourism (private sector, community, etc.), management agencies (cultural, tourism management, and conservation agencies), and Management Boards of PAs in support of assessing the potential of expanding services to increase the revenue of 164 existing PAs, strengthening their capacity to deliver relevant services and invest in facilities for selected PAs so that they can become higher quality service providers.

Finance Solution 1.2: Expand payment for ecosystem services to Marine Protected Areas. This solution includes the following major actions:

1. Developing a feasibility study for PMES related to marine areas in Viet Nam.
2. Completing a set of criteria for identifying priority marine areas for the application of PMES in Viet Nam based on quantified values that are developed scientifically.
3. Piloting PMES programs in some provinces and proposing the possibility of and roadmap for PMES application in the network of Viet Nam's MPAs.
4. Developing the legal framework (probably the Draft Circular on Guiding PMES) for development of a PMES exchange market based on transparency in the use of marine space and typical ecosystems.

Finance Solution 1.3: Promote public-private partnerships in biodiversity conservation. This solution focuses on measures to invest in biodiversity conservation using the PPP approach. Based on a holistic review of the legal regulations on public and PPP investments, specific regulations on the PPP mechanism will be developed, a portfolio of suitable biodiversity-related projects for PPP investment will be built, selected PPP investment projects will be piloted and reviewed for implementation experience, and the legislation on PPP investment in biodiversity conservation will be revised.

Finance Solution 1.4: Increase Official Development Aid financing for biodiversity conservation. This solution aims to achieve two things:

1. Improving the cost efficiency of the actual funds received, i.e. getting more out of every dollar received.
2. Increasing the actual amount received.

The implementation of this solution also aims to ensure that ODA funds received are used in the right way and on the right project, where they have the most impact and are aligned with national objectives. In order to achieve the expectation of improving ODA cost efficiency, the following actions will be implemented within this finance solution:

1. Conducting evaluations of the efficiency of ODA utilization in biodiversity-related projects, using ODA funds to thereby propose solutions to improve the effective use of ODA.
2. Developing guidelines/manuals to ensure the effective use of ODA related to biodiversity.
3. Disseminating guidelines/manuals to ODA-funded biodiversity projects.

Type 2: Solutions That Avoid Future Biodiversity Expenditures

Finance Solution 2.1: Promote biodiversity offset mechanisms. The *Roadmap for the Development of a Biodiversity Offset System in Viet Nam*, including supplemental technical guidelines for a biodiversity impact assessment, developed and published by MoNRE in 2015, outlines the steps that need to be taken to develop a compensation system, including technical methods for assessing habitat loss and compensation sites, financing mechanisms for development projects' money transfer to reimburse for biodiversity losses, service providers, legal requirements to ensure the system is applied, and institutional capacity to perform different tasks. Specific actions include:

1. Establishing a MoNRE task force to conduct necessary studies.
2. Formulating a project to receive funding from donors for piloting the offset scheme.
3. Adopting a policy for no net loss to biodiversity.
4. Strengthening the capacities of MoNRE and service providers.
5. Developing an effective institutional framework.
6. Developing and implementing medium- and long-term programs to achieve biodiversity offsetting in practice.

Type 3: Solutions That Deliver Finance Resources More Effectively and Efficiently

Finance Solution 3.1: Apply an environmental accounting system. This proposal aims to assist Viet Nam in preparing to apply SEEA in the future, possibly after 2025. This solution includes the following major actions:

1. The GSO cooperates closely with the United Nations Statistical Commission to contribute to the completion of the SEEA Central Framework and SEEA subsystems for sectors.
2. The GSO and research institutions carry out activities to introduce/disseminate the SEEA to provinces and relevant agencies and pilot the application of SEEA in selected provinces and PAs.
3. The piloting phase will be evaluated, providing inputs for adjusting SEEA methods of the United Nations Statistical Commission in accordance with the conditions of Viet Nam.
4. The legal regulations and institutional arrangement will be developed to ensure the application of SEEA (including developing capacity for staff at all levels in the national statistical system and relevant agencies; technical and technological infrastructure and other specialized software).

Finance Solution 3.2: Add a state budget index code for biodiversity conservation. This solution aims to determine a separate budget line for natural resources and biodiversity conservation in the State Budget Index. The government at all levels will get a comprehensive and reliable picture of state efforts to implement biodiversity conservation policies and ensure efficient budget allocation. Development partners can also use this index to budget, explain, and report on financial sources for biodiversity conservation provided to Viet Nam. A consistent information system of state budget expenditures provided by the State Treasury will reduce the cost of collecting and processing information for biodiversity conservation expenditure management. This is also the basis for ensuring accountability in the allocation, management and use of the state budget for biodiversity.

Finance Solution 3.3: Adopt results-based budgeting. This solution engages the following major actions:

1. Developing and reviewing a list of tasks, services, and products with direct or indirect objectives related to biodiversity conservation, which are covered partially or fully by the state budget; continuing to develop economic and technical norms as a basis to apply RBB.
2. Applying task assignments and ordering the services/tasks/products with economic and technical norms in the biodiversity conservation units, first of all PA Management Boards.
3. Preparing conditions to apply this method nation-wide, especially building capacity for managing staff and providing for technical and technological infrastructure and specialized software to support the monitoring and/or evaluation on the level of task completion to provide information for the budget process.
4. Reviewing/evaluating and adjusting economic and technical norms.
5. Applying RBB by assigning tasks, ordering, and bidding to all of the biodiversity conservation units which are qualified enough to apply the budget management.

1 INTRODUCTION

1.1 Overview

Due to its wealth of biodiversity, Viet Nam has been acknowledged as one of the most prioritized countries for global conservation, which has been reflected in its three main values: maintaining ecological functions (environmental protection), delivering economic supplies (direct use), and providing for socio-cultural engagement (Ministry of Natural Resources and Environment, 2008).[1]

A number of Protected Areas (PAs) in Viet Nam today are globally and regionally recognized, including 8 Ramsar sites, 9 World Biosphere Reserves, 2 World Natural Heritage Sites, 1 World Cultural and Natural Heritage Site, and 5 ASEAN Heritage Parks. Furthermore, there are currently 63 Important Bird and Biodiversity Areas (IBAs) in Viet Nam.

In Viet Nam, biodiversity brings direct and indirect benefits to humans, contributing substantially to the national economy, especially for sectors such as agriculture, forestry, and fisheries; ensuring food security; maintaining genetic resources for farming animals and crops; and providing construction materials, pharmaceutical materials, and food. In addition, ecosystems play an important role in climate regulation and environmental protection. Biodiversity has also been a cultural and artistic inspiration to humanity for millennia (MoNRE, 2013).[2]

According to the *Policy and Institutional Review* (PIR) (UNDP, 2018), economically, biodiversity contributes directly or indirectly to many sectors, households, and firms. In the agricultural sector,[3] about 20 million people rely on fisheries, exploiting more than 300 marine species and more than 50 species of economically valuable freshwater fish, while 25 million people living in or near the forests earn 20-50% of their income from harvesting non-timber forest products (NTFPs), including medicinal plants and rubber. As such, there is a great reliance on products and services provided by biodiversity and ecosystems.

As also stated in the PIR Report, the beautiful biodiversity and terrestrial and coastal landscapes and islands are the foundation for Viet Nam's rapidly expanding tourism industry. Ecotourism is becoming more popular in Nature Reserves (NRs), encouraging education on natural protection and benefiting local people who provide tourism services. About 70% of Viet Nam's rapid tourism growth is occurring in coastal areas and areas with natural ecosystems characterized by high biodiversity. From 2010 to 2016, domestic tourists increased from 28 million to 62 million, and foreign tourists increased from 5 to 10 million. Tourists spend between VND 96,000 billion and VND 400,000 billion. It is estimated that high biodiversity value areas, including National Parks (NPs), PAs, and Landscape PAs, attract 40%-60% of tourists and have earned 20% of their spending.

In addition to many direct economic benefits, biodiversity supports a range of important ecosystem services, including strengthening the national response to the threat of climate change.

As concluded in the *National Report on the Status of the Environment in the Period 2011-2015* (MoNRE, 2015), biodiversity in Viet Nam has been severely degraded. Ecological systems are negatively affected

[1] MoNRE (2008), 4th Country Report on Viet Nam's Implementation of the Biodiversity Convention.

[2] MoNRE, Viet Nam Environment Administration (VEA), 2008.

[3] Agriculture (including forestry and fisheries) contributes significantly to the gross domestic product (GDP) of Viet Nam. Although the share of contribution in GDP decreased from 20% in 2010 to 17% in 2015, the export value increased from USD 19 billion in 2010 to USD 32 billion in 2016.

and overexploited; the area of forests, especially natural forests, is decreasing in an alarming way. The extinction rate of some species is increasing day by day. The main proximate causes for the loss of biodiversity – flora and fauna species as well as ecosystems and habitat – include:

- Deforestation, fragmentation, and land use change from the expansion of commercial agriculture, urbanization and infrastructure development, extensive forest logging, aquaculture, pond farming, etc.
- Ecosystem degradation from overexploitation, subsistence NTFP collection, poaching and the wildlife trade, and overfishing.
- Pollution.

According to the PIR Report (UNDP, 2018), the root causes of biodiversity degradation and loss include:

- Economic development without consideration for biodiversity and related ecosystems.
- Population growth.
- An ineffective and insufficient institutional and legal framework, including lack of coordination, governance, and enforcement.
- A lack of knowledge, understanding and appreciation, for biodiversity and beneficial ecosystem services provided, among development sectors and communities.

The *Viet Nam National Biodiversity Strategy to 2020, Vision to 2030* (NBS; MoNRE, 2013) analyzed the direct causes of biodiversity degradation in Viet Nam, which include the illegal and excessive exploitation of biological resources, the fragmentation and degradation of habitats and ecosystems, pollution, introduction of invasive alien species, climate change, and forest fires.

1.2 Legal and Policy Framework of Biodiversity Conservation

Legal framework

At the highest level, the need to conserve biodiversity is defined in the Constitution of Viet Nam (passed by the National Assembly on November 21, 2013), stipulating that the State must adopt and implement policies to protect the environment, promote the effective management and sustainable use of natural resources, and preserve nature and biodiversity. Organizations and individuals causing environmental pollution, natural resource depletion, and biodiversity decline or loss must be strictly dealt with, and have the responsibility to compensate for damages (Article 63). The financial and institutional policies of the Vietnamese economy in general, and biodiversity conservation in particular, are carried out in three frameworks which are stipulated in Viet Nam's Constitution, including:

1. Natural resources, including land, water, and minerals are public assets managed by the State (Article 53).
2. Government budgets and other public financial instruments are publicly and transparently managed (Article 55).

3. National policy-making processes are based on decisions of the National Assembly (NA), including laws and particular decisions on, for example, national budget plans and guidelines for annual national budget allocations.

Viet Nam's system of national policies and laws on nature conservation and biodiversity is being increasingly enacted, with important laws being implemented such as the Law on Biodiversity, Law on Forest Protection and Development, Law on Fisheries, and Law on Tourism.

Viet Nam is a member of many international conventions and commitments on biodiversity conservation, such as the Convention on Biological Diversity (CBD) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), among others.

National development policy

Biodiversity conservation is mentioned in a number of national development policy documents:

- The *Evaluation of Socio-Economic Development in the Period of 2011-2015 and Development Orientation for the Period 2016-2020*[4] emphasizes the decline in area and quality of many natural ecosystems, especially forest areas, wetlands and seabeds, highlighting the need for green economy development, environmental protection, and biodiversity conservation, and targeting forest coverage to achieve 42% by 2020. The government was requested by the Party Central Committee to stop exploiting natural forests and to mobilize official development assistance (ODA) for forest protection and development (Directive No. 13-CT/2017/TW, dated January 12, 2017), as well as to apply the mechanism of "polluter pays" and the principle of "beneficiary pays" in environmental protection and the conservation of natural resources (Resolution No. 02-KL/2016/TW, dated April 26, 2016, evaluating 10 years of implementing Document 41-NQ/2006/TW on environmental protection in national industrialization period).
- The National Assembly's *5-Year Plan for Socio-Economic Development 2016-2020* (Resolution No. 142/2016/QH13, dated April 12, 2016) identified the limitations in implementing solutions to cope with climate change, natural resource management, and environmental protection prior to 2015. The NA determined that to 2020, more attention should be paid to mitigating and adapting to climate change, improving the effectiveness of natural resource management and environmental protection. By 2020, policies and institutional arrangements on forest protection, nature conservation, and biodiversity need to be strengthened.
- In the *Socio-Economic Development Plan for 2017* (enclosed to Resolution No. 23/2016/QH14, dated November 7, 2016), the NA determined that investment projects that do not comply with environmental safety standards and risk causing environmental pollution will be eliminated.
- The *Viet Nam Sustainable Development Strategy* (Agenda 21), issued by the government as Decision No. 153/2004/QD-TTg (dated August 17, 2004) formulated for the first time the mechanism that environmental polluters and beneficiaries of natural resources must be responsible for paying for natural environment services. The *Viet Nam Sustainable Development Strategy for the Period 2011-2020* (approved by PM Decision No. 432/2012/QD-TTg, dated April

[4] The report was presented at the 12th National Congress of the Communist Party of Viet Nam, taking place from January 20 to 28, 2016.

12, 2012), states that sustainable development is a requirement throughout the country's development process, which means that the reasonable and harmonious combination of economic development, social development, and protection of natural resources and the environment is a must. The Agenda also includes indicators related to natural resource and environment, including forest coverage, proportion of protected land, and biodiversity conservation.

- The *National Strategy on Green Growth for the Period 2011-2020 and Vision to 2050* (Decision 1393/2012/QD-TTg, dated September 25, 2012) promotes environmentally friendly investment projects, proposes economic and financial policies to develop "natural capital," and encourages participatory investment in environmental services in the PAs to restore degraded ecosystems. The implementation of this strategy was assigned to the Ministry of Planning and Investment (MPI) as the key agency, and the Ministry of Finance (MoF) was assigned to allocate a budget for the implementation of the strategy by reviewing regulations related to environmental protection taxation, the enterprises' use of natural resources, and corporate incomes. Currently, the budget estimates for the implementation of this strategy are not yet available.
- The Government of Viet Nam has taken many actions to promote nature and biodiversity conservation, such as to require MoNRE, the Ministry of Agriculture and Rural Development (MARD), the Ministry of Industry and Trade (MoIT), MoF, MPI, and Provincial People's Committees (PPCs) of provinces and cities to implement measures of nature protection and biodiversity conservation, such as strictly controlling the Environmental Impact Assessments (EIA) of investment projects, closing natural forests (Resolution No. 01/2017/NQ-CP, dated January 1, 2017).

The above-mentioned legal and policy framework is the basis for the national Biodiversity Finance Plan (BFP) for Viet Nam.

1.3 Global Biodiversity Finance Initiative

National governments have demonstrated clear commitment to fulfil their mandates for biodiversity conservation and sustainable use in ways compatible with national development goals, and to identify a diverse range of finance solutions for biodiversity management.

The global Biodiversity Finance Initiative (BIOFIN) is managed by UNDP in partnership with the European Commission and the Governments of Germany, Switzerland, Norway, and Flanders. Guided by a global steering committee representing its partners, BIOFIN aims to develop a methodology for quantifying the biodiversity finance gap at the national level, improving cost-effectiveness through the mainstreaming of biodiversity into national development and sectorial planning, and developing comprehensive national finance plans. BIOFIN will thus provide a framework for undertaking "bottom-up" analyses and resource mobilisation strategies embedded in a transformative process led by national stakeholders, aimed at allowing countries to implement their National Biodiversity Strategy and Action Plans (NBSAPs) and achieve national biodiversity targets. BIOFIN will feed into the development of NBSAPs, while the NBSAP projects in turn will provide a platform for integration into decision-making processes.

Working with the global BIOFIN team, 35 countries are currently involved in developing and piloting the new methodology, to be refined through regional and global learning and made available more widely:

Belize, Brazil, Bhutan, Botswana, Cambodia, Chile, Colombia, Costa Rica, Cuba, Ecuador, Fiji, Georgia, Guatemala, India, Indonesia, Kazakhstan, Kyrgyzstan, Madagascar, Malawi, Malaysia, Mexico, Mongolia, Nepal, Peru, Philippines, Seychelles, South Africa, Sri Lanka, Rwanda, Tanzania, Thailand, Rwanda, Uganda, **Viet Nam**, and Zambia.

In Viet Nam, BIOFIN is managed by UNDP's Ecosystems and Biodiversity Programme and MoNRE, and consists of four components:

1. Integrating biodiversity and ecosystem services in sectorial and development policy, planning, and budgeting.
2. Assessing the financing needs for the management and conservation of biodiversity and ecosystem services.
3. Developing a Biodiversity Finance Plan including a vision for the future sustainable management of biodiversity, reviewing past expenditures and financing needs, and identifying and prioritising a wide range of financing solutions.
4. Initiating the implementation of the Biodiversity Finance Plan at the national level.

The Viet Nam BFP is built within the framework of the Project of Mobilizing Resources for Biodiversity and Sustainable Development to implement Solution #5 as provided in the Viet Nam NBS, specifying the following tasks:

1. The State will ensure resources and budgets in accordance with the delegated level to implement activities of the Strategy.
2. Encouraging and mobilizing community participation and business-sector investment in biodiversity conservation; conducting research on the establishment of a Biodiversity Conservation Fund; and developing mechanisms to diversify investment sources for biodiversity conservation, particularly payments for environmental services, biodiversity offsets, and other financial mechanisms through carbon markets and private sector investment.
3. Strengthening the support of foreign organizations and individuals in biodiversity conservation activities.

1.4 The Viet Nam National Biodiversity Strategy

Viet Nam's *NBS to 2020, Vision to 2030* (approved by PM Decision No. 1250/2013/QĐ-TTg, dated 31 July 2013), states the Vision of Biodiversity to 2030 as follows:

> *By 2030, 25% of degraded ecosystems of national and international significance will be restored; biodiversity shall be conserved and used sustainably, bringing major benefits to the citizenry and contributing significantly to the country's socio-economic development.*

The viewpoints that serves as fundamental basis for the Strategy include:

1. Biodiversity is a fundamental element of the green economy; biodiversity conservation is one of the key measures to adapt to and mitigate the impacts of climate change.

2. Conservation and sustainable use of biodiversity contributes to poverty reduction and improved living conditions of the citizenry.
3. Biodiversity conservation shall be the responsibility of the whole society, of State authorities, agencies, and every organization and individual.
4. Socialization and international cooperation are enhanced to promote conservation and sustainable development of biodiversity.
5. Biodiversity conservation must be integrated into national, sectorial, and provincial development strategies, plans, and policies.

OVERALL AND SPECIFIC TARGETS OF VIET NAM'S NATIONAL BIODIVERSITY STRATEGY

Overall Target to 2020 Naturally important ecosystems, endangered, rare, and precious species, and genetic resources are preserved and used sustainably, contribute to the development of the green economy, and actively respond to climate change.	
Specific targets	**Set for 2020**
To improve the quality and increase the area of protected ecosystems.	1. The area of terrestrial PAs covers 9% of the country. 2. Marine protected areas (MPAs) account for 0.24% of the sea area. 3. Forest coverage reaches 45% and primary forest remains at 0.57 million hectares, coupled with effective protection plans. 4. Mangrove forests, sea grass beds, and coral reefs are maintained at the current levels. 5. 15% of important natural ecosystem areas will be restored. 6. The number of internationally recognized PAs is increased to 10 Ramsar wetlands, 10 Biosphere Reserves, and 10 ASEAN Heritage Parks.
To improve the quality and populations of endangered, rare, and precious species.	1. No new case of species extinction is reported. 2. The status of endangered, rare, and threatened species is significantly improved.
To ensure that precious genetic resources are not impaired or eroded.	1. Compile an inventory of, store, and conserve native, endangered, rare, and precious genetic resources (including animals, plants, and microorganisms).

The vision, overall target, and specific targets of the NBS are envisioned to be realized through the implementation of 5 Major Tasks and 6 Solutions:

5 Major Tasks

1. Conservation of natural ecosystems.
2. Conservation of wildlife and endangered, rare, and precious species.
3. Sustainable use, fair and equitable access, and sharing of benefits derived from ecosystems and biodiversity.

4. Control of activities that have negative impacts on biodiversity.
5. Biodiversity conservation in the context of climate change.

6 Solutions

1. Enabling an overall change in behavior and awareness of state management organizations and communities towards biodiversity conservation and sustainable use.
2. Improving the legislative and institutional system and strengthening the capacity of law enforcement for the implementation of legal acts on biodiversity.
3. Strengthening integration of biodiversity conservation in policy development.
4. Promoting scientific research, development, and the application of modern technology in conservation and sustainable use of biodiversity.
5. Increasing financial resources for biodiversity conservation.
6. Promoting integration and international cooperation in conservation and sustainable use of biodiversity.

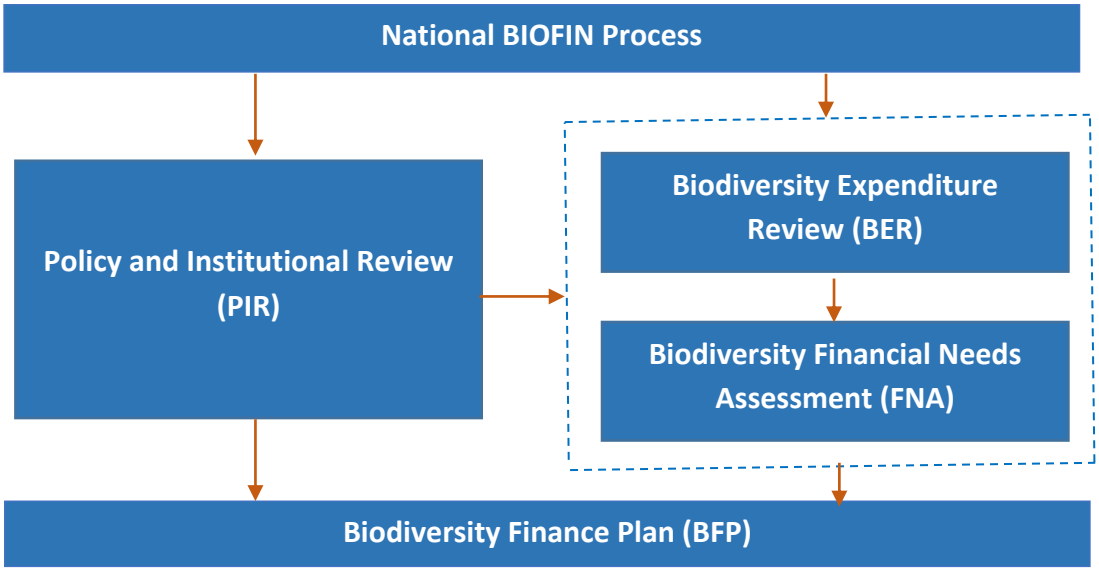
The institutional arrangement for implementation of the VN NBS focuses on the participation of all relevant government organizations, civil society organizations, and the private sector. Sectoral institutions are requested by the government to integrate biodiversity into their sector development strategies. The preparation and implementation of the 7 priority programs of the VN NBS is assigned to 12 central government agencies and the government authorities of 63 provinces, as well as the PA management authorities. However, coordination between stakeholders for implementation of the VN NBS is weak, and progress is slow due to the lack of (a) comprehensive Action Plan(s).

2 METHODS OF BIODIVERSITY FINANCE PLANNING

2.1 Biodiversity Finance Plan Process

The BFP follows the guidance provided in the *BIOFIN Workbook* (2018) as diagrammed in **Figure 1** below.

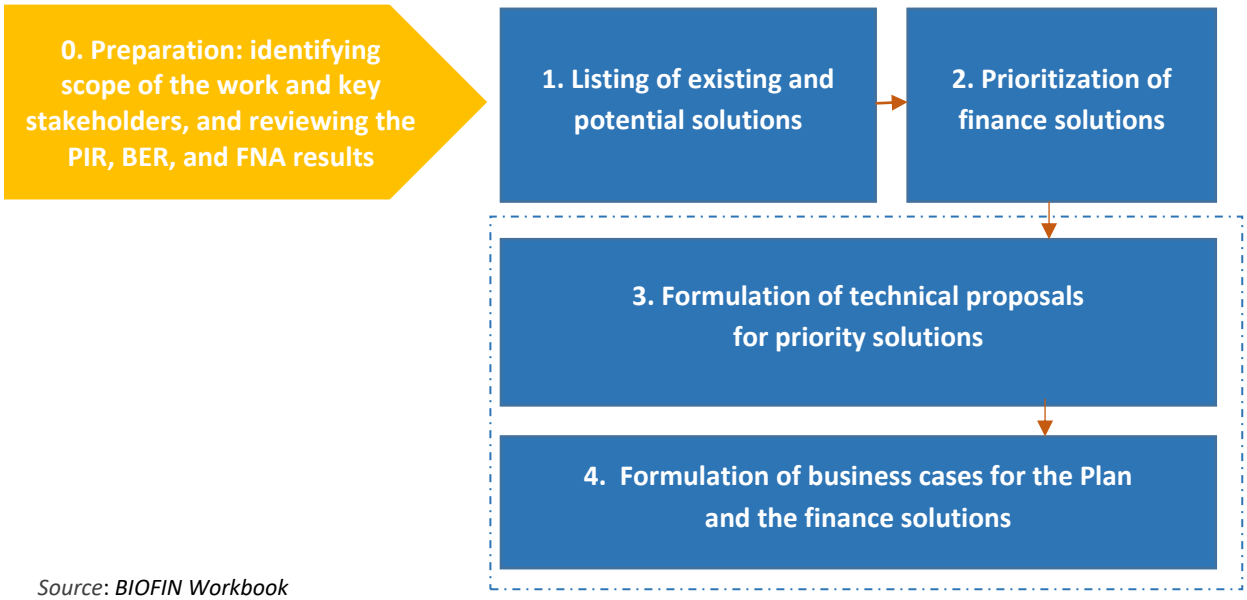
Figure 1 Overview of the Viet Nam national BIOFIN process



Source: The Biodiversity Finance Initiative – BIOFIN - Technical Guidance Series – Webinar Version (2018)

At the stage of BFP development, the specific steps conducted are presented in **Figure 2** below.

Figure 2 Overview of approach for the development of the Viet Nam Biodiversity Finance Plan



Source: *BIOFIN Workbook*

Specifically, the steps have been conducted as follows:

Step 0 Preparation. The Technical Group (TG), i.e. the Finance Planning Team, has conducted a review of baseline studies including the *Policy and Institutional Review* (PIR), the *Biodiversity Expenditure Review* (BER) and *Biodiversity Financial Needs Assessment* (FNA), which were conducted from the end of 2017 to October 2018. Subsequently, the TG conducted surveys in conjunction with other TGs conducted by the *Biodiversity Finance Initiative* project (BIOFIN) in the following NPs: Ba Vi NP, Cuc Phuong NP, Sao La NP, and the Cu Lao Cham MPA.

The results of the PIR, BER, and FNA reports affect the next steps, summarized in Section 2.2 below.

Step 1 Listing of existing and potential solutions. The listing is based on the results of the studies mentioned above, referring to international experience and using the list of integrated solutions in the BIOFIN Catalogue according to the *BIOFIN Workbook* (2018).

Step 2 Prioritising finance solutions. This has been conducted in sub-steps as follows:

Step 2.1 Rapid screening. The TG and other TGs responsible for the development of the PIR, BER, and FNA for Biodiversity quickly reviewed potential solutions from the BIOFIN Catalogue, according to the instructions in the current *BIOFIN Workbook* (2018) and with the support of international BIOFIN group members, including BIOFIN groups from the Philippines. This quick review process used a 4-point scale for three criteria groups:

1. Potential for biodiversity impact: potential to create impacts on sustainable development and biodiversity conservation at a significant level.
2. Scale of financial opportunity/financial scale and sustainability: how much, how long, and how stable/sustainable?
3. Political feasibility and likelihood of success technically, socially, and politically.

The result of Step 2.1 was the identification of 54 existing and potential solutions, with 24 solutions selected for detailed review.

Details of the questions used for the rapid screening, as well as the quantitative outcomes and scoring of the individual solutions, are presented in Appendix 1 (part A).

Step 2.2 Detailed screening. The solutions selected during the rapid screening step were subsequently evaluated in detail. The TG used 19 evaluation/review criteria to further distinguish the list of solutions from Step 2.1, resulting in the 19 mid-/long-term solutions and 5 short-term solutions.

Details of the questions used in the detailed screening, as well as the quantitative outcomes and scoring of the individual solutions, are presented in Appendix 1 (part B).

Step 2.3 Stakeholder consultations. The solutions selected as a result of the quantitative screening procedures in Steps 2.1 and 2.2 were subsequently presented to stakeholders for a qualitative assessment of their appropriateness for Viet Nam, including: the UNDP Country Office in Viet Nam; leaders and officials of the Nature and Biodiversity Conservation Agency under the General Department of Environment, MoNRE; Department of Finance and Planning, General Department of Forestry, Directorate of Fisheries, MARD; Department of Tax Policy, Department of Debt Management and External Finance, Department of Public Expenditure, MoF; Viet Nam Forest Protection and Development Fund (FPDF); and

UN-REDD representatives. In this step, the TG also integrated some of the 19 solutions selected in Step 2.2 due to their comparable nature (for example, integrating into ODA solutions for biodiversity from multilateral and bilateral ODA solutions). At the same time, the solution of results-based budgeting (RBB) and the ongoing initiatives of public-private partnerships (PPP) were included after the surveys in the NPs, for a total of 26 preliminary selected finance solutions (**Table 1**).

Table 1 Preliminary identified finance solutions for strengthening biodiversity finance in Viet Nam

Number	Solutions recommended for implementation	Remark
1	Biodiversity offsets	Selected
2	Bioprospecting	Consultation workshop recommendation: exclude
3	REDD+	Included in the PEES
4	Human resources management	Cross-cutting solution
5	Increasing Official Development Assistance (ODA)	Selected
6	Bilateral ODA	Selected (integrated into the ODA)
7	Climate aid	Selected (integrated into the ODA)
8	Multilateral ODA	Selected (integrated into the ODA)
9	Other official flows	Selected (integrated into the ODA)
10	Payment for ecosystem services (PES)	Selected
11	Payment for ecosystem services: state intermediation and/or fee	Selected (integrated into the PES)
12	Penalties and other compensation for unplanned environmental damage	Consultation workshop recommendation: exclude
13	Promotion of sustainable tourism	Selected
14	Taxes, fees, and quotas in the fishery sector	Consultation workshop recommendation: exclude
15	Refining incentives and other regulations in the fishery sector	Consultation workshop recommendation: exclude
16	Taxes on natural resources (non-renewable)	Consultation workshop recommendation: exclude
17	Taxes on fuel	Consultation workshop recommendation: exclude
18	Taxes on renewable natural capital	Consultation workshop recommendation: exclude
19	Taxes, fees, and royalties in the forestry sector	Consultation workshop recommendation: exclude
20	Forestry concession fees	Consultation workshop recommendation: exclude
21	Water tariffs	Consultation workshop recommendation: exclude
22	Water abstraction charges	Consultation workshop recommendation: exclude
23	Wastewater fees	Consultation workshop recommendation: exclude
24	Penalties for illegal hunting and collecting	Consultation workshop recommendation: exclude
25	Public-private partnerships	Consultation workshop recommendation: exclude
26	Results-based budgeting	Recommended by the consultation workshop to be included and after the surveys in the NPs

Source: outcome of stakeholder consultation workshops

Step 2.4 Stakeholder workshop. In November 2018, a stakeholder workshop was held in Hanoi with representatives from all agencies and organizations consulted in Step 2.3. During the workshop, experts suggested reviewing the proposed solutions related to taxes. The adjustment of tax rates was not considered appropriate given the current situation of very low public support for taxes. The experts also proposed the removal of the solutions related to the application of penalties for illegal hunting and wildlife collection. In addition, the experts proposed the integration of some short-term solutions into medium and long-term solutions, as they are of the same nature of intervention.

Step 2.5 Expert consultations. In December 2018, the TG organized a technical working session for follow-up consultations with a group of biodiversity experts, experts that developed the BER, financial experts and officials of the Nature and Biodiversity Conservation Agency under the General Department of Environment, and officials of the UNDP Country Office in Viet Nam. Participants reviewed the comments received during the Stakeholder Workshop. Based on all comments received, the experts proposed some adjustments, including:

1. Reorganizing solutions by groups.
2. Not classifying solution groups according to implementation time (short-term, or medium/long-term), instead including the implementing time of each solution in the plan schedule.
3. Rephrasing the names of the objectives to avoid misunderstanding on the content of the solution; solutions related to more efficient use of tax revenues were considered especially important to clarify.
4. Forecasting the expected revenue generated by each solution where possible.

However, this forecast of expected revenue is currently not possible, because the solutions are all in the form of a general proposal, therefore it is necessary to conduct further studies to limit the scope of implementation (such as implementation areas, implementation demand for solutions implementation and expected financial revenue from solutions). The limitations of the BFP are stated in section 3.2.

Step 2.6 Additional expert consultations. During the first quarter of 2019, additional meetings between the TG and international BIOFIN experts and domestic experts were conducted. Once again the selected solutions were reviewed, and the solution group *Realign Current Expenditures* – specifically, the solutions "Realign revenues from fuel tax to biodiversity conservation" and "Realign taxes on non-renewable natural resources towards biodiversity conservation" – was removed because currently tax revenues are merged into the total state budget and distributed under the Budget Law, meaning that it is extremely hard to impossible to redirect the financial resources of this source directly towards biodiversity. Experts in the field of biodiversity conservation and reimbursement of traditional medicine were also consulted to provide more updated information on these 12 solutions.

Step 3 Formulation of proposed priority solutions. To develop the final proposal for priority solutions, the TG compiled all the data from Step 0 and Step 2, referring to the reports on financial planning for biodiversity from other countries. The total number of solutions selected as result of screening, prioritization, and stakeholder consultations up to Step 2.6 in Spring 2019 was 12. In June 2019, a final consultation workshop was organized, during which it was concluded that 8 solutions were assessed as the most feasible for inclusion in the Viet Nam BFP at this stage.

The full proposal for priority solutions is presented in Chapter 3 of this report, as such being the Biodiversity Finance Plan.

2.2 Key Findings of the PIR, BER, and FNA Reports as Basis for the BFP

As mentioned in Section 2.1, the three Viet Nam BIOFIN reports provide important inputs along with results of the surveys conducted in some PAs to propose finance solutions for biodiversity. This section summarizes some of the key findings from the three reports.

Policy and Institutional Review (PIR)

- In recent decades, 54 biodiversity finance solutions from the BIOFIN Catalogue have been applied in Viet Nam. These are solutions on government budget management, Payments for Forest Environmental Services (PFES), various Trust Funds (TFs) on environmental protection, forest protection, and fishery development, among others. This represents the government's consideration of biodiversity conservation as a critical part of the national development process. However, the effectiveness of biodiversity finance solutions remains in question, as some solutions could not be replicated beyond the pilot phase (such as Trust Fund for Forests (TFF) and Community Funds), or created limited outcomes (such as biodiversity offsets or a biodiversity lottery). In addition, many finance mechanisms are managed by different organizations, and effective implementation of these mechanisms is limited due to the lack of a coordinated structure, resulting in limited funding for biodiversity conservation.
- The Government has committed to mobilizing finance for biodiversity conservation from different financial sources as defined in the Law on Biodiversity, National Strategy on Biodiversity, and other sector development strategies. Financing for biodiversity is also guided by policies defined in the State Budget Law and the Public Investment Law. However, the actual mobilization of financial resources depends on the balance of the government budget. It is concluded that investment in biodiversity and environmental protection is not a priority in the government's budget allocation plan. Currently, there is a budget code to finance environmental protection activities, but there is no separate budget code for biodiversity or PAs in the government expenditure code system. As a result, government budget allocations for biodiversity are embedded within the budget line for environment protection. The fact that the Government has committed to spend about 1% of the annual budget for environmental protection is a good signal, but the actual level of budget allocation for biodiversity and environment is unofficially determined each year in the annual state budget allocation plan. In addition, there are no investment projects for biodiversity conservation that are included in the government investment program for the period 2016-2020.
- The actual budget allocation of the government for biodiversity depends on the state budget balance. The MoF and MPI are the two agencies assigned to allocate funds at the central level. The PPCs of 63 provinces also play a leading role in allocating government budgets for biodiversity in their provinces.
- Some funds such as the Viet Nam Environmental Protection Fund (VEPF) and the FPDF are public financial institutions. The financial support for biodiversity conservation of these funds is very limited, as the funds are responsible for preserving their charter capital and lack any additional income from financial resources. The funds often focus on lending to investment projects, and only spend a portion

of their profits to support biodiversity. Community development funds for nature protection are often small-scale and limited in terms of finance/institutions. The PFES mechanism is an important source of finance for forest development including biodiversity conservation but lacks a comprehensive monitoring system. The biodiversity offset mechanisms proposed in the Law on Biodiversity have not been established.

Biodiversity Expenditure Review (BER)

- The estimated total expenditure for biodiversity in the period of 2011-2015 was about VND 22,910,016 million (USD 1,018 million[5]), equal to an average annual expenditure for biodiversity of about VND 4,582 billion (USD 203.65 million).
- Most of the biodiversity expenditure in Viet Nam comes from the state budget (77%), followed by social resources (19%) and lastly the private sector (4%).
- Total biodiversity expenditure accounted for 0.16% of Gross Domestic Product (GDP) and 0.58% of total state budget expenditure in the period of 2011-2015, slightly higher than other Southeast Asian countries such as Thailand (0.1% of GDP and 0.05% of total budget expenditure)[6] and the Philippines (0.08% of GDP and 0.31% of total budget expenditure).[7]
- With regard to the Major Tasks specified in the VN NBS, biodiversity expenditure in the period of 2011-2015 was allocated to its different targets: 40% of resources were allocated for "sustainable use, fair and equitable access and sharing of benefits derived from ecosystems and biodiversity," 34% for the "conservation of natural ecosystems," 13% for the "control of activities which negatively impact on biodiversity," and less than 10% for other Major Tasks.
- About 65% of the financial resources allocated to the PA system were spent on salaries and operating costs as well as infrastructure maintenance, while only about 35% of funding allocated was directly spent for conservation activities.
- In many PAs, no attention has been paid to investing in buffer zones to reduce conservation pressure, including in PAs like Ta Dung NP (Dak Nong Province) and Bu Gia Map NP (Binh Phuoc Province).
- Regarding the overall trend, public expenditure for biodiversity tended to decrease, while social expenditure tended to increase and private expenditure remained stable in the period of 2011-2015.

Biodiversity Financial Needs Assessment (FNA)

- The FNA presents its results in two scenarios: *Scenario 1*, estimating the finance needs for optimal biodiversity conservation in Viet Nam without further expansion of the PA network; and *Scenario 2*, estimating the finance needs for optimal biodiversity conservation in Viet Nam assuming an expansion

---

[5] These figures are considered incomplete, as the BER presents only expenditure statistics of selected financial entities at the central and local levels. Due to limitations in access to financial data in general, and specific data on expenditure for biodiversity in agencies and units in particular, there are many direct and indirect biodiversity expenditures from departments, agencies, organizations, and units directly under MARD, MoNRE, the Ministry of Science and Technology, MPI, the Ministry of Industry and Trade, the Ministry of Education and Training, the Ministry of Home Affairs, the Ministry of Public Security, and PPCs that could not be included for analysis. Similarly, private biodiversity expenditure has been aggregated from existing data and information from NGOs including IUCN, WWF, BirdLife International, and FFI, and does not include expenditure of other NGOs specialized/prominent in biodiversity such as Pan Nature, TRAFFIC, Wildlife Conservation Association, ENV, etc.

[6] Thethach Chuaprapaisilp (2017), Public, Private and Civil Society Biodiversity Expenditure Review in Thailand, Thailand.

[7] BIOFIN Philippines (2016), Public and Private Biodiversity Expenditure Review, Philippines.

of the PA network in line with adopted state policies. The FNA calculated the biodiversity finance gaps for the two scenarios compared to the estimated future biodiversity expenditure in Viet Nam under the "business-as-usual" scenario, i.e. calculated in the BER based on actual financing allocated for biodiversity conservation in Viet Nam during the period 2011-2015, forecasted to 2030 as function of GDP growth.

  - *Scenario 1.* Until 2030, the total financial needs for optimal biodiversity management and achieving the targets of the VN NBS with a PA system as existing in 2018 amount to VND 150,408 billion (USD 6,539 million). During this period, the finance need will increase annually from about VND 8,717 billion (USD 379.0 million) in 2018 to about VND 14,988 billion (USD 651.7 million) in 2030, exclusively in consideration of annual inflation and GDP growth.
  - *Scenario 2.* Until 2030, the total financial needs for optimal biodiversity management and achieving the targets of the VN NBS with an PA system expanded by 697,176.6 ha amount to VND 185,286 billion (USD 8,056 million),

- The implementation of Scenario 1 considers financing optimal biodiversity management only in PAs existing in 2018, equal to 7.5% of the country's surface area. As such, the relevant VN NBS target for PA cover will not be achieved. Scenario 2, meanwhile, is the scenario estimating the finance needs for biodiversity management including a PA network expansion in line with adopted government policies, to achieve a PA coverage by 2030 equal to 9.6% of the country as stipulated in the VN NBS. Accordingly, finance needs for optimal biodiversity conservation in Viet Nam under Scenario 2 require an additional VND 34,877 billion (USD 1,516 million; +23%) compared to the finance needs estimated under Scenario 1.
- Compared to the business-as-usual future finance allocations forecasted in the BER based on actual allocations to 2015, under Scenario 1 the finance gap to achieve optimal biodiversity management in Viet Nam is about VND 2,600 billion (USD 113.1 million) in 2018, gradually decreasing to about VND 1,809 billion (USD 78.7 million) in 2025, and to about VND 818 billion (USD 35.57 million) in 2030. The total biodiversity finance gap for the period 2018-2030 under Scenario 1 is estimated at VND 23,939 billion (USD 1,041 million).
- Under Scenario 2, the annual finance gap in 2018 and 2019 is equal to that in Scenario 1, as no new PAs are gazetted in these years. Subsequently, due to the significant expansion of the PA network in the period 2020-2025, the annual biodiversity finance gap to achieve optimal biodiversity management in Viet Nam more than doubles, from about VND 2,476 billion (USD 107.6 million) in 2019 to about VND 5,825 billion (USD 253.3 million) in 2025. Between 2025 and 2030, the PA system further expands, but less rapidly, and as such the annual finance gap to 2030 slightly reduces to about VND 4,763 billion (USD 207.1 million). The total biodiversity finance gap for the period 2018-2030 under Scenario 2 is estimated as VND 58,8161 billion (USD 2,557 million).

The gap between estimated finance needs for optimal biodiversity management in Viet Nam under Scenarios 1 and 2 and estimated future finance allocations for biodiversity management under the business-as-usual scenario is largely explained by the minimal to no financing currently allocated to biodiversity conservation measures in PAs; business-as-usual financing is only provided to PAs in support of covering cost categories for salaries and operational costs, while the FNA strived to obtain realistic quantified estimates for all cost categories, even if at present PAs do not receive financing for such costs.

3 BIODIVERSITY FINANCE PLAN

3.1 Objectives

The overall objective of the Biodiversity Finance Plan is to contribute effectively to the implementation of the *Viet Nam NBS to 2020, Vision to 2030*, and the achieving of all specific targets through implementing prioritized finance solutions, focusing on increasing revenues, minimizing/avoiding future biodiversity expenditure, and using financial resources more efficiently.

Specifically, the finance solutions proposed in the BFP aim to contribute to achieving a reduction or closing of the funding gap for optimal biodiversity management to 2030, estimated at VND 58,816,395 million (USD 2,557 million) by the BIOFIN Viet Nam FNA with support of the BIOFIN Viet Nam BER.

The eight finance solutions for biodiversity proposed for inclusion in the BFP are grouped under three types,[8] following the guidance of the *BIOFIN Workbook* (2018):

1. **Solutions that generate revenues**: mechanisms (e.g. environmental taxes, etc.) that can generate or leverage additional financial resources for allocation to biodiversity.
2. **Solutions that avoid future biodiversity expenditures**: measures that can prevent or reduce future investment needs in biodiversity by eliminating, reducing, or amending counter-productive policies, expenditures, and behaviors (e.g. taxes on fertilizers or targeted investments to avoid future combatting alien invasive species).
3. **Solutions that deliver financial resources more effectively and efficiently**: measures or strategies that can enhance cost-effectiveness/efficiency, create synergies, and/or favor a more equitable distribution of resources (e.g. enterprise challenge funds, national conservation funds, effective procurement, etc.).

The eight solutions selected as the outcome of the subsequential quantitative scoring and qualitative stakeholder consultation process described in section 2.1 are presented in **Table 2** below. Each proposal selected is described in detail, including: (i) description of the finance solution; (ii) economic and/or policy context; (iii) social and environmental benefits, and contribution to the National Biodiversity Strategy; (iv) expected financial or economic benefits; (v) responsible parties and their respective roles; and (vi) timeline and milestones for policy action.

[8] Another group, namely "realign current expenditures," that implies measures for re-orienting existing financial flows towards biodiversity or away from harmful activities such as eliminating perverse agriculture subsidies and using the proceeds to fund biodiversity friendly businesses is not included in this BFP, as no solution in this group has been assessed as appropriate for Viet Nam.

Table 2 Finance solutions selected for inclusion in the Biodiversity Finance Plan

BIODIVERSITY FINANCE SOLUTIONS PROPOSED		Scoring results
Type 1: Solutions that generate revenues		
Solution 1.1	Promote sustainable tourism and collect service fees in PAs	76/95 (80%)
Solution 1.2	Expand payment for ecosystem services to MPAs	85/95 (89%)
Solution 1.3	Promote PPP in biodiversity conservation	Solution is recommended in Viet Nam (not in BIOFIN catalogue)
Solution 1.4	Increase ODA financing for biodiversity conservation	88/95 (83%)
Type 2: Solutions that avoid future biodiversity expenditures		
Solution 2.1	Promote biodiversity offset mechanisms	76/95 (80%)
Type 3: Solutions that deliver financial resources more effectively and efficiently		
Solution 3.1	Apply an Environmental Accounting System	Solutions are recommended in Viet Nam (not in BIOFIN catalogue)
Solution 3.2	Add a state budget index code for biodiversity conservation	
Solution 3.3	Adopt results-based budgeting	

3.2 Limitations

Initially the BFP anticipated that, for each proposed finance solution, the expected revenue generated or savings achieved from implementing the finance solution could also be quantified. However, during the working process the TG noted that full access to the data necessary for making these calculations could not be ensured. Therefore, this BFP focuses on providing a description of the priority finance solutions, the actions to be taken, the responsibilities of relevant agencies, and the anticipated improvements to be achieved.

At the same time, the quantitative assessment of additional finance revenues secured or costs saved for biodiversity conservation and achieving the targets of the Viet Nam NBS remain highly speculative, due to the numerous unknowns and large set of assumptions that must be made, specifically related to alterations in legal-regulatory framework, budgeting and allocations, finance collection and retainment, etc. In future initiatives to strengthen biodiversity finance in Viet Nam, attention shall be paid to quantifying the forecasted financial benefit (revenue or savings) for each solution in detail, based on the strengthened engagement and participation and engagement of state management agencies responsible for implementing a finance solution, and focusing on elaborating the detailed activities and developing an implementation budget to be used in a quantitative cost-benefit analysis.

After consultation with experts, the TG decided to remove the group of proposed solutions on realigning current expenditures, i.e. any measures that can reorient existing financial flows towards biodiversity, including for example eliminating and reforming fossil fuel/fuel subsidies and using these resources to invest in renewable energy or alternative green infrastructure. Accordingly, the BFP provides priority solutions only for three types of solutions: those that generate revenue, avoid future biodiversity expenditure, and deliver financial resources more effectively and efficiently.

3.3 Finance Solutions

3.2.1 Type 1: Solutions That Generate Revenues

SOLUTION 1.1 GENERATE REVENUE FROM SUSTAINABLE TOURISM AND COLLECT SERVICE FEES IN PAS

BACKGROUND

The United Nation World Tourism Organization Network (UNWTO) states that sustainable tourism needs to:

1. In terms of the *environment*: make the best use of environmental resources that play a key role in tourism development, maintaining essential ecological processes, and helping to maintain natural heritage and natural biodiversity.
2. In terms of *culture*: respect the social and cultural honesty of local communities, preserve cultural heritage and traditional values that have been built and are alive, and contribute to intercultural understanding and sharing.
3. In terms of the *economy*: ensure long-term economic activities, providing socio-economic benefits to all beneficiaries that are equally distributed, including careers and the opportunity to collect stable profits and social services for local communities, and contribute to poverty reduction.

Promoting sustainable tourism in PAs will enable PAs to provide revenue-generating services such as guided climbing, diving, photography, videography, camping, and tourist accommodation. The provision of services is considered a sustainable financial mechanism to increase revenue sources for PAs, supporting them to meet their recurrent expenditure requirements and increase funding for the biodiversity conservation which is the main task of PAs.

Currently, the implementation of sustainable tourism activities in Viet Nam faces many difficulties, namely:

- Viet Nam does not yet have an infrastructure system, including transport roads, with safety standards and accessibility for tourists to move quickly, safely, and conveniently.
- Tourists may infringe on the assets of the tourism area without being aware of all the long-term effects to the ecological environment and long-term benefits to communities.
- PAs do not have facilities and manpower to provide sustainable tourism services.
- Private organizations (travel companies) do not yet apply environmentally friendly standards or biodiversity conservation to the services they provide.

DESCRIPTION

This solution focuses on measures to develop sustainable tourism, emphasizing the participation and coordination of all groups engaged in tourism (private sector, community, etc.), management agencies (cultural, tourism management, and conservation agencies), and Management Boards of PAs in support of assessing the potential of expanding services to increase the revenue of 164 existing PAs, strengthening

their capacity to deliver relevant services and invest in facilities for selected PAs so that they can become higher quality service providers. Particularly, the solution includes:

1. Assessing the capacity of PAs possessing ecosystems with high biological diversity for offering sustainable tourism activities. Capacity is understood according to (i) physical aspects (maximum number of tourists that a PA can receive); (ii) society (limitations of the number of visitors to avoid negative impacts of activities starting to appear to the cultural and social life of the region); and (iii) management (maximum number of tourists that a PA can serve).
2. Conducting an assessment of all PAs to obtain accurate data on current revenues from entrance fees and services provided and evaluating their potential (scale of service expansion of each PA) in relation to strategies and plans of the tourism sector as well as the socio-economic development plan of each province.
3. Provinces with PAs developing strategies or plans on local sustainable tourism development, in which activities of the PAs are an integral part.
4. All PAs developing Business Plans, including a forecast on revenues from entrance fees and services provided to be aggregated and synthesized by line agencies, and assessing the application of different prices for adjusting the Financial Management Regulations of PAs with integrated revenues.
5. Human resources for sustainable tourism being developed, including PA staff and communities participating in providing tourism services. A popular feature of sustainable tourism packages is the educational factor, enhancing the understanding of tourists on natural ecological characteristics and the culture of local communities, therefore the tour guide team needs to have knowledge on ecology in addition to other standard skills of the profession.
6. Raising awareness to administer rules-based sustainable tourism services for tourism businesses, communities, and visitors.
7. Developing relationships/connections between tourism operators (people doing traditional tourism are less committed to biodiversity conservation) and managers of PAs and local communities to ensure common actions in protecting the natural and cultural values of the region in the long term.
8. Connecting enterprises and communities that provide sustainable tourism services with the Payments for Marine Ecosystem Services (PMES) authorities (if both Solution 1.1 and Solution 1.2 are implemented in accordance with the proposed roadmap), as the system for Marine PAs is one of the steps towards sustainable tourism.
9. Assessing the impact from sustainable tourism activities on biodiversity conservation levels in order to make recommendations on policy and legal adjustments; adopting and applying these recommendations towards maximizing resources from tourism activities to be retained or made available for re-investment in biodiversity conservation.
10. Reviewing and developing regulations on the prices of services provided by PAs, with emphasized coordination between line ministries, PA authorities, local authorities, and the tourism sector.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: With regards to natural tourism resources, Viet Nam is assessed as a country with a great potential for sustainable tourism development because of its high biodiversity, with many rare and endemic wildlife species as well as many unique ecosystems and beautiful landscapes. The system of Viet Nam's NPs and NRs is distributed over 52 of its 63 provinces and cities, covering a total area (planned to 2020) of about 2.4 million hectares in support of protecting most specific ecosystems and rare and endemic flora and fauna species, as well as important habitats. According to the 2017 report by the Viet Nam Administration of Forestry (VNFOREST) on the inspection of ecotourism activities in NPs and NRs, the system of Viet Nam's NPs and NRs is diverse both in natural resources and human resources for ecotourism development. The study identified typical ecotourism product groups suitable for Viet Nam's NPs and NRs (**Table 3**).

Table 3 Potential for development of typical ecotourism product groups of some NPs and PAs

	Relevant tourism products	Suitable for PAs	Current fees
1	Bird watching	Xuan Thuy NP, Tram Chim NP, U Minh Thuong NP, Cape Ca Mau NP	According to Circular 206/2016/TT-BTC issued by MoF, the entrance fees applied for some PAs including Bach Ma NP, Cuc Phuong NP, Ba Vi NP, Tam Dao NP, Yokdon NP, and Cat Tien NP are as follows: *Adults*: VND 60,000/person (USD 2.6) *Students/pupils*: VND 20,000/ person (USD 0.8) *Children*: VND 10,000/person (USD 0.4)
2	Wildlife watching	Cat Tien NP, Phong Nha Ke Bang NP, Van Long NR	
3	Turtle watching, scuba diving for looking at coral reefs	Con Dao MPA, Nui Chua MPA, Hon Mun MPA, Nha Trang Bay, Cu Lao Cham MPA	
4	Butterfly and insect watching	Tam Dao NA and Cuc Phuong NP	
5	Frog/amphibian watching; observing rare and precious endemic species like azaleas and orchids	Bach Ma NP, Cat Tien NP, Hoang Lien NP, Bidoup – Nui Ba NP	
6	Marine tourism	Cat Ba NP, Bai Tu Long NP, Cu Lao Cham MPA, Con Dao NP and Phu Quoc NP	
7	Exploring the indigenous culture of ethnic minorities	Hoang Lien NP, Ba Be NP, Cuc Phuong NP, Bach Ma NP, Cat Tien NP...	

In addition, NPs and NRs are also able to develop sustainable tourism products focusing on other activities, such as visiting caves in Phong Nha Ke Bang NP, visiting coral reef, wetland, and mangrove ecosystems in Xuan Thuy NP, U Minh Thuong NP, and U Minh Ha NP, and other tourism products. In particular, many NPs and NRs have ethnic minorities living in the core and/or buffer zones, offering a good opportunity to develop tourism products related to discovering local cultures, such as in Sa Pa (Hoang Lien NP), Pac Ngoi Village (Ba Be NP), Ban Khanh (Cuc Phuong NP), A Don Village (Bach Ma NP), and Ta Lai Commune and Dak Lua Commune (Cat Tien NP).[9] Sustainable tourism is also becoming increasingly attractive to domestic tourists, in addition to the inherent attraction for foreign visitors.

[9] https://baotintuc.vn/du-lich/du-lich-sinh-thai-ben-vung-bai-1-loai-hinh-du-lich-cua-tuong-lai.htm

According to the PIR (UNDP, 2018), high-biodiversity areas such as NPs, PAs, and natural landscapes have attracted 20% of tourist spending. Specifically, in 2016, total tourist spending was VND 400,000 million (USD 17.8 million), of which VND 80,000 million (USD 3.6 million) was spent in high biodiversity-value areas. This tourist spending benefited many different service providers, not only PAs. If PAs expand their provision of services such as tour guides, camping services, photography, videography, mountain climbing, scuba diving, and rental of sightseeing equipment, the revenue collected from providing such services to tourists can partly meet the financial needs of the PAs.

Legal framework: The legal basis to ensure feasibility of the solution is as follows:

- The Politburo's Resolution No. 08-NQ/2017/TW (dated 16 January 2017) on developing tourism into a spearhead economic sector.
- The Law on Tourism No. 09/2017/QH14 (dated 19 June 2017, entering into force on 1 January 2018) identifies sustainable tourism as the rule for tourism development (Article 4). In Article 3, the law also states that ecotourism is a form of tourism that is based on nature, connected with the local cultural identity and based on the participation of the local communities in combination with environmental education. Article 19 stipulates that community tourism is a special tourism product based on promoting a local cultural tourism identity, as well as participation and management of the community.
- The State Budget Law No. 83/2015/QH13 (approved by the NA in 2015 and entering into force on 1 January 2017, replacing the 2002 State Budget Law) allows public service delivery units, including PAs, to use the revenue generated from service provision, along with government budgets, to cover operation costs, including employee bonus increase (Article 32.5).

Social and environmental benefits, and contribution to the National Biodiversity Strategy

The solution to promote sustainable tourism in Viet Nam aims at multiple benefits:

1. Sustainable tourism with the participation of local communities in providing tourism services will create an incentive to protect the environment and conserve biodiversity.
2. Ensuring economic benefits from services provided will strengthen local livelihoods. At the same time, the culture of indigenous communities will also be preserved and spread widely to domestic and international tourists.
3. Strengthening the financial autonomy of PAs is a sustainable solution in support of biodiversity conservation because capital mobilized adds to, or reduces pressure on, the state budget.

PAs have the main task of ensuring biodiversity conservation. Therefore, ensuring a part of revenues from providing services is an incentive mechanism for the Management Boards of PAs to implement effective biodiversity activities.

Box 1 Current state of sustainable tourism development and revenues at NPs and PAs

According to the *2017 Ecotourism Activity Monitoring Report of NPs and NRs* of the Viet Nam Administration of Forestry under MARD, 61 out of 167 existing PAs have organized business activities (including 25 of 34 NPs and 36 of 133 NRs), providing ecotourism activities in three forms:

- Self-organization (56 PAs)
- Joint venture (11 PAs)
- Forest environment lease (13 PAs)

Thus, 92% of NPs and NRs organize (part of) their own tourism business, while other ecotourism activities are provided through joint ventures or the leasing of forests to third parties.

According to *the Report of the Management Board of Special Use and Protection Forests*, in 2016 the NPs and NRs welcomed more than 2 million visitors, an increase of 178% compared to 2015 (1,154,000 visitors). Total revenue from tourism activities reached over VND 114 billion (USD 4.96 million), an increase of 48% compared to 2015 (VND 77.3 billion; USD 3.36 million). NPs and NRs have paid VND 32 billion (USD 1.39 million) to the state budget and deducted VND 9 billion (USD 391,000) for natural conservation activities from tourism revenue. Although the budget remittances and additional funding for conservation activities from tourism activities are modest, the figures show that tourists and revenues from tourism activities are an important source of additional income for NPs and NRs which is expected to increase in the future.

Source: VNFOREST (2017); Department of Special-Use and Protection Forest Management (2016).

The solution contributes to all three Specific Targets of the NBS: better quality of PAs, improvement in the quality of ecosystems and populations, including endangered, rare, and precious species, and the conservation of genetic resources.

EXPECTED FINANCIAL OR ECONOMIC BENEFITS

1. If tourism activities are organized/implemented sustainably, the negative impacts of tourism activities to ecosystems can be limited; as such, this solution supports reducing necessary spending for conserving or restoring biodiversity.
2. If this solution is combined with Solution 1.2 (payments for tourism services in MPAs), this will increase the revenue to finance the biodiversity conservation tasks.
3. According to a survey conducted in 20 PAs as presented in the BER and FNA, 5 out of 20 PAs have revenues from service provision in the period 2011-2015, the proportional contribution to the total budget being different, specifically Yen Tu NR: 16%, Bu Gia Map NP: 0.45%, Phong Nha Ke Bang NP: 8.1%, Cuc Phuong NP: 3%, Phia Oac – Phia Đen NP: 7.4%.
4. It is not possible to accurately determine the rate of service provision for individual as well as all PAs for the 2020-2030 period if there is no specific development plan for individual PAs or for all 164 PAs (this is an activity included in the implementation timeline below).
5. However, it is possible to assume the relatively feasible expectation that by 2030, 50% of PAs providing services (i.e. 22 PAs) can achieve an increase in revenues, covering at least 50% of their

total recurrent expenditure, while the other 50% of PAs providing services can achieve revenues from services that can cover at least 30% of their total recurrent expenditure.

6. In the period of 2025 – 2030, the number of PAs that can provide revenue-generating services in addition to the current 44 PAs should be maximized.

A challenge is that, during initiation of this solution, a large financial investment may be required for infrastructure development and training programs for target groups envisioned to provide to sustainable tourism services, including employees of PAs, NPs, local administrative and security authorities, travel companies, tourism employees, and representatives of local communities.

Box 2 Designing and implementing a tourism fee system for MPAs, starting with Hon Cau MPA

An agreement has been made with the Binh Thuan Department of Agriculture and Rural Development (DARD) responsible for the management of the Hon Cau MPA to support the project *Sustainable Community-Based Eco-Tourism Development in Hon Cau MPA*. As part of the project, a tourism fee system was designed for the MPA, including the payment of entrance fees and fees on activities such as diving. The 12,500-ha MPA is rich in biodiversity, with the main tourist attraction being its pristine coral reefs. The MPA is visited by around 5,000 tourists annually, who enter the MPA either by fishing boats or passenger boats licensed by the province. Tourism activities in Hon Cau MPA are currently uncontrolled, and negative impacts on the land- and seascape are being reported.

The objectives of tourist fees are to (i) increase the control of visitors as the island is reaching it carrying capacity, and (ii) generate revenues to better manage the MPA and conserve marine biodiversity.

At present, the number of tourists is around 5,000 people (or 42 tourists/day*120 days/year). This number is expected to increase in the following years when the project is being implemented.

The entrance fee is expected at VND 40,000/person (min. fee rate) to VND 100,000/person (max fee rate). Thus, the generated budget is estimated in **Table 4**.

Table 4 Estimation of revenue from tourist entrance fee at Hon Cau MPA

Year	2020	2022	2025	2030
Number of tourists per day	200	250	400	500
# tourism days (6 months/yr*20 days/month)	120	120	120	120
Number of tourists per year	24,000	30,000	48,000	60,000
Min Fee Rate (VND)	40,000	40,000	40,000	40,000
Max Fee Rate (VND)	100,000	100,000	100,000	100,000
Min Fee Revenue (VND million)	**960**	**1,200**	**1,920**	**2,400**
Min Fee Revenue (USD)	**42,667**	**53,333**	**85,333**	**106,667**
Max Fee Revenue (VND million)	**2,400**	**3,000**	**4,800**	**6,000**
Max Fee Revenue (USD)	**106,667**	**133,333**	**213,333**	**266,667**

In addition to the entrance fee, service fees – for example, for coral reef snorkelling, sea turtle watching, etc. – could be about VND 400,000/person (USD 17). If only 10% of tourists to Hon Cau MPA were to use such services, the revenue could be (2,400 people*VND 400,000/ person = VND 960,000,000; USD 42,000) by 2020, to increase to VND 2.4 billion (USD 106,000) by 2030.

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- The Viet Nam National Administration of Tourism, in collaboration with the General Department of Forestry, the Directorate of Fisheries (MARD), MoNRE, and the Management Boards of PAs, carries out an overall assessment of the capacity of PAs to receive tourists.
- The Viet Nam National Administration of Tourism, in collaboration with the General Department of Vocational Training (MoLISA) and provinces, conducts human resource training activities for the communities that participate in providing sustainable tourism services.
- PAs implement activities to upgrade facilities and improve the capacity of human resources in organizing and providing sustainable tourism services.
- The above-mentioned agencies develop models to coordinate the organization of sustainable tourism activities and distribution of benefits from these activities among stakeholders (PA – Tourism Enterprise – Community).
- MoNRE, in collaboration with the Viet Nam National Administration of Tourism, General Department of Forestry, Directorate of Fisheries (MARD), and provinces, assesses the impact of sustainable tourism activities on biodiversity and proposes changes or develops legal normative documents for regulation based on the results of impact assessments.
- Provinces with PAs develop strategies or plans for local sustainable tourism, in which activities of the PAs are an integral part.
- MARD and MoNRE conduct an overall assessment of the status quo of revenue generation services offered in the 164 existing PAs.
- Provincial People's Committees (PPCs) of provinces with PAs integrate activities of PAs into local socio-economic development plans.
- The General Department of Tourism coordinates with MARD, MoNRE, PPCs, and PA Management Boards in the implementation of provincial sustainable tourism programs, with PAs as destinations.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020	Assessment of the capacity of PAs for offering tourism activities completed.
2020-2021	Provincial strategies or plans on local ecotourism completed.
2021	PA business plans completed.
2021-2023	HR for sustainable tourism (including communities participating in providing tourism services) developed.
2020-2025	Coordination between tourism operators, PA managers, and local communities strengthened.
2025	Coordination for linkages between enterprises and communities that provide sustainable tourism services with the PMES authorities developed.
2026	Assessment of impact from sustainable tourism activities on biodiversity completed.
2027	Recommendations from the impact assessment are applied widely to maximize resources from tourism activities made available for re-investment in biodiversity conservation.

SOLUTION 1.2 EXPAND PAYMENT FOR ECOSYSTEM SERVICES TO MPAS

BACKGROUND

Based on the established model of applying Payment of Forest Environmental Services (PFES) in Viet Nam, this solution proposes to introduce a similar system for Marine Ecosystem Services (PMES). Ecosystem services are the benefits that ecosystems provide to people, contributing directly or indirectly to people's welfare (MEA, 2005).[10] Ecosystem services are the structures and processes through which ecosystems support and provide for human well-being directly and indirectly based on functional activities of the systems. Interventions in ecosystems are associated with the cost of other ecosystem services. Payments for Ecosystems Services (PES), also known as Payments for Environment Services, are an economic tool used to stipulate beneficiaries from ecosystem services to reward people engaged in maintaining, protecting, and developing functions of the ecosystem. For example, coastal mangrove forests have a regulatory impact on wave attenuation, mitigating the impact of natural disasters while also maintaining aquatic resources in the region, etc. Therefore, beneficiaries who directly exploit ecosystem values provided by mangroves must be responsible for paying a corresponding amount to those directly involved in maintaining and protecting the functions of the mangrove forest. PES has been applied since the 1990s in many countries around the world (e.g. Mexico, Costa Rica, and China) and is considered a sustainable financial mechanism for biodiversity conservation and poverty reduction. Broadly, two models exist: (1) private companies engage in direct contracts with ecosystem service providers; and (2) public schemes where government signs agreements with ecosystem service providers (BIOFIN Catalogue of Biodiversity Finance Solutions, 2018).

Viet Nam has about 20 coastal and marine ecosystems distributed over 1 million km^2 in the East Sea, with associated ecosystem services that support national sustainable socio-economic development. Marine economic activities in particular are closely linked to the exploitation and use of ecosystem services. PES is seen as a mechanism to promote the creation and use of ecosystem services by connecting service providers (such as marine PAs) and ecosystem service users engaged in marine farming, seafood exploitation, and tourism activities. However, the concept of PMES is still new in Viet Nam (and for the rest of the world), therefore it is necessary to conduct thorough research before applying this mechanism for the practical management of marine resources and environment in Viet Nam.

DESCRIPTION

This solution includes the following major actions:

1. Develop a feasibility study for PMES related to marine areas in Viet Nam, including the following:
    - A paper that summarises PMES application tools and models in countries around the world and in Viet Nam.
    - A synthesis of experiences from implementing PFES in Viet Nam, at least including: (1) analyzing and evaluating existing databases, and (2) investigating further the quantified value of services provided by some representative marine ecosystems in Viet Nam (corals,

[10] Millennium Ecosystem Assessment 2005 (http://www.millenniumassessment.org)

seagrass, mangrove forests, and coastal lagoons) in some key areas, as well as the potential exploitation conditions of coastal ecosystems.

- An analysis of the potential agents in the scheme, providers (kind of ownership and management ability of the resources), and users (e.g. local fishermen, foreign trawlers).
- An investigation and evaluation of the ability to apply voluntary or compulsory payment approaches for the reinvestment in conservation and development of ecosystems; determination of the roles and responsibilities of service providers and service users and the government.
- An assessment of the possible payment vehicles and related conditionality for the provision of the service; as appropriate, development of the legal framework and system for transactions including payment frequency, contractual setup, etc.

2. Complete a set of criteria for identifying priority marine areas for the application of PMES in Viet Nam based on quantified values that are developed scientifically.
3. Pilot PMES programs in some provinces and propose the possibility of and roadmap for PMES application in the network of Viet Nam's MPAs.
4. Develop the legal framework (probably the Draft Circular on Guiding PMES) for development of a PMES exchange market based on transparency in the use of marine space and typical ecosystems.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: Since 2011, Viet Nam has been officially implementing the PFES mechanism. This is a new, innovative, and effective finance mechanism for mobilizing financial resources for sustainable forest protection, management, and development. In the period of 2011-2016, overall 474 PFES contracts were signed, and the total revenue collected during this period amounted to VND 6,510.6 billion (USD 283.1 million), of which the revenue from hydropower production facilities accounted for 97.04%, revenue from water supply facilities was 2.37%, and revenue from the tourism service sector was 0.23%. In 2017, the revenue from PFES exceeded VND 1,709 billion[11] (USD 74.3 million), from hydropower production (95.45%), water supply (3.76%), and tourism services (0.75%), while industrial production facilities and cold-water fish farms using water accounted for about 0.02%. Revenues in 2017 increased by 33% compared to 2016 due to increased rainfall, concentrated in the Northwest, Central, and Central Highlands regions where many large hydropower plants are located, resulting in a much higher electricity production and related PFES payments compared to 2016. In 2017, the country disbursed VND 1,189.3 billion (USD 51.6 million) to more than 136,000 forest owners including households, individuals, communities, 197 forest management boards, 85 forestry companies, 544 Commune People's Committees, and 203 other forest owners (socio-political organizations) for the management and protection of 5.985 million hectares of forest, accounting for about 43% of the total forest area nationwide. Overall, 44 provincial Forest Protection and Development Funds (FPDFs) have been established across the country, and 494 PFES contracts have been signed. Most contracts have been signed with a new appendix in accordance with Decree 147, which is a prerequisite and very important

[11] As of July 30, 2018: the whole country has gained nearly VND 1,600 billion of PFES, up 72% compared to the same period of 2017 due to the impact of the electricity price adjustment from VND 20/kWh to VND 36/kWh. Besides, Forest Environmental Service (FES) users have been more serious about the FES declaration and payment in full and on time.

basis for organizing the collection and disbursement to forest owners, households and individuals receiving forest protection contracts.[12] If this PFES mechanism can be applied to marine ecosystem services, it can be expected that a significant revenue source will be in place to pay for those involved in maintaining, protecting and developing system functions of marine ecosystems.

Legal framework: The MPES legislative system includes the Law on Fisheries (2017); Circular No. 02/2017/TT-BTC (dated 6 January 2017) of MOF on *Guidance on the Expenditure Management for Environmental Activity*; and Decision No. 742/2010/QD-TTg (dated 26 May 2010) of the Prime Minister on *Approving the Plan on the System of Viet Nam's Marine Protected Areas Through 2020*.

Social and environmental benefits, and contribution to the National Biodiversity Strategy

Under Decision No. 742/2010/QĐ-TTg, between 2010-2015 Viet Nam implemented the planning of and put into operation MPAs which aim to contribute to local economic development.

The solution to adopt PMES aims at multiple benefits:

1. The collection of PMES payments for the exploitation of marine ecosystem services is expected to significantly supplement funding for conservation activities as well as the management operations in MPAs, as such contributing to better biodiversity conservation.
2. PMES payments to communities and land/resources owners will be made through the mechanism based on PMES Funds to be established, with the aim to strengthen the conservation focus in natural resources use, as such reducing pressures.
3. Local economic benefits from PMES payments will strengthen local livelihoods, as such promoting conservation.
4. Strengthening the financial autonomy of MPAs is a sustainable solution in support of biodiversity conservation because capital mobilized adds to, or reduces pressure on, the state budget.

The solution contributes to all three Specific Targets of the NBS: better quality of PAs, improvement in the quality of ecosystems and populations, including endangered, rare, and precious species, and the conservation of genetic resources.

Expected financial or economic benefits

Currently, the PMES mechanism is still in the study phase, as the value of marine ecosystems – the basis on which to decide payments – has not been identified, so the specific financial results cannot be determined.

However, from the experience of implementing the PFES mechanism, it can be expected that the PMES mechanism will also generate a significant amount of revenue for biodiversity conservation purposes.

Responsible parties and their respective roles

- The Directorate of Fisheries (MARD) is the agency in charge of performing the following tasks:

[12] http://vnff.vn/tin-tuc/tin-trung-uong/2018/1/mot-so-ket-qua-noi-bat-trong-thuc-hien-chinh-sach-chi-tra-dich-vu-moi-truong-rung-nam-2017

1. Developing the scientific basis to quantify the utilization values of coastal ecosystems and propose the PMES mechanism;
2. Developing a set of criteria for identifying priority maritime areas for application of PMES in Viet Nam;
3. Developing a draft Circular on guiding the application of PMES in MPAs and typical coastal ecosystems (seagrass beds, mangrove forests, coral reefs, and coastal lagoons).

- Provinces with MPAs participate in PMES pilot activities and provide comments on developing draft circulars guiding the application of PMES in MPAs and typical coastal ecosystems.
- MARD is responsible for coordinating the implementation process of this solution with the Directorate of Fisheries and provinces.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020-2022	Feasibility study for PMES related to marine areas in Viet Nam completed.
2022-2023	Set of criteria for identifying priority marine areas for the application of PMES in Viet Nam developed.
2023-2025	Roadmap for PMES application in the network of Viet Nam's MPAs proposed based on the pilot PMES program in some provinces.
2025	Circular on Guiding PMES for development of a PMES exchange market based on transparency in the use of marine space and typical ecosystems drafted.
2026 onwards	PMES mechanism in the whole system of Viet Nam’s MPAs enforced.

SOLUTION 1.3 PROMOTE PUBLIC-PRIVATE PARTNERSHIPS IN BIODIVERSITY CONSERVATION

BACKGROUND

Currently, Viet Nam does not have an investment project for biodiversity conservation in the form of public-private partnerships (PPP). However, Viet Nam can encourage this kind of investment for mobilizing resources from the private sector to reduce the investment pressure from the state budget. The proposed solution as described below focuses primarily on studying biodiversity projects that have the potential to attract private investors based on applying the PPP model.

According to the BER (UNDP, 2018), between 2011-2015, private sector expenditure for biodiversity conservation in Viet Nam amounted to VND 977,562 million (USD 43.4 million), focusing on the sustainable use of natural ecosystems, ecosystem-based approaches in response to climate change, and the conservation of rare and endangered wild species. If a greater involvement of the private sector can be promoted, this financial resource will further supplement the state budget for financing biodiversity conservation. The most active entities are International Non-Government Organizations (NGOs) (such as WWF, FFI, Bird Life International, IUCN, Australian Environmental Research Agency). Funding for NGO activities is provided by domestic and international private donors (multinational companies, private companies, private funds, etc.). According to incomplete statistics, in the period of 2011-2015, there were about 20 projects implemented by NGOs to support PAs and communities in PA buffer zones with regards to the management and sustainable use of natural resources, protection of rare and precious plant and animal species, awareness raising about the value and importance of biodiversity, and piloting community-based management in PAs. Though funds for these projects come from private investors, government agencies, and multilateral organizations, they cannot be considered as investment projects in PPP form.

Private investors will find it interesting to invest in new PAs that need to be established in line with adopted legislation until 2030 in exchange for being given the right to sustainably use these PAs to recover their investment capital while using part of the revenues for biodiversity conservation activities. This must be highly regulated and monitored, however, due to the probable risks of corruption and ensuring achievement of the agreed conservation objectives.

In the period 2020-2025, the focus of this solution is on:

1. Studying and assessing PAs (and related infrastructure works, such as transportation) that can attract private sector investments.
2. Elaborating a specific PPP mechanism for biodiversity conservation, because the selection of suitable biodiversity projects for investment in the form of PPP requires a thorough assessment, avoiding the situation where enterprises invest in unsustainable exploitation activities to recover capital invested, resulting in negative impacts to the ecosystem in the long run.

DESCRIPTION

The solution includes the following main actions:

1. Conducting a holistic review of the legal regulations on public investment and PPP investment in Viet Nam in comparison with the leading practices on PPP in the biodiversity conservation sector.

2. Developing specific regulations on applying the PPP mechanism to biodiversity conservation.
3. Building a portfolio of biodiversity-related projects suitable for PPP investment to attract investment from the private sector, initially prioritizing infrastructure works such as access roads to PAs. This should be implemented based on capacity assessment studies of PAs as discussed in solution 1.1 to promote and encourage sustainable tourism.
4. Piloting selected PPP investment projects and summarizing implementation experiences for feasible models.
5. Revising the legal regulations on PPP related to biodiversity conservation based on the outcomes of the pilot PPP investment projects.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: The reality in Viet Nam has shown that private sector investment projects have contributed to achieving a significant improvement in the infrastructure quality in Viet Nam, meeting the socio-economic development requirements[13] of the country. If experience in PPP investment in infrastructure development could be directed towards e.g. investment in access roads to PAs to facilitate sustainable tourism, or towards investment in building facilities that directly or indirectly serve biodiversity conservation objectives, the PPP model could attract significant resources from the private sector for biodiversity conservation.

Legal framework: Legal provisions on applying the PPP model are included in Decree 63/2018/ND-CP, encouraging the private sector to invest in transport infrastructure projects, rather than targeting the environment and biodiversity. Currently, the International Monetary Fund (IMF) and financial institutions such as the World Bank (WB), the Asian Development Bank (ADB), the Japan Bank for International Cooperation, JICA, the French Development Agency (AFD), research agencies, international experts, etc. are cooperating with the Government of Viet Nam in researching, evaluating and improving the system of legal regulations on public investment and PPP investment.

SOCIAL AND ENVIRONMENTAL BENEFITS, AND CONTRIBUTION TO THE NATIONAL BIODIVERSITY STRATEGY

The benefits of this solution are comparable to those of other solutions, especially Solution 1.1 (*Promote sustainable tourism*) and Solution 1.2 (*Expand payment for ecosystem services to MPAs*) in that beneficiaries of financial income generated from ecosystem services will be incentivised to strengthen the conservation of biodiversity as the source of their income.

As such, proper implementation of this solution, including appropriate management guidance, monitoring, and control, has the potential to contribute to all three Specific Targets of the NBS: better quality of PAs, improvement in the quality of ecosystems and populations, including endangered, rare, and precious species, and the conservation of genetic resources.

[13] http://www.baokiemtoannhanuoc.vn/van-de-hom-nay/day-manh-dau-tu-ppp---giai-phap-hieu-qua-de-phat-trien-ha-tang-140298

EXPECTED FINANCIAL OR ECONOMIC BENEFITS

Considering that the Government of Viet Nam is strictly managing loans in order to limit public debts, the PPP model is one among many solutions to mobilize private funds as well as human resources to manage investment projects.

Experiences in implementing the PPP model in recent years show that PPP investment projects mainly focus on infrastructure development. Meanwhile, a major constraint for implementing Solutions 1.1 and 1.2 is the limitation on suitable infrastructure (such as access roads to high biodiversity value areas), so if this solution can be implemented, it is forecasted that private funds can be mobilized for upgrading infrastructure that connect with high biodiversity value areas.

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- MPI and MoF collaborate with international organizations to conduct studies/research and to evaluate and improve/complete legal system of public investment and PPP investments.
- MARD and MoNRE collaborate with the Viet Nam National Administration of Tourism and PA Management Boards to propose projects (including infrastructure development projects) that can support the implementation of tourism activities.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020-2023	Review of legal regulations on public investment and PPP investment in Viet Nam in comparison with the leading practices completed.
2023	Specific legal regulations on PPP related to biodiversity conservation developed.
2020-2023	Portfolio of biodiversity-related projects suitable for PPP investment completed and disseminated among potential investors.
2023-2025	Selected PPP investment projects piloted, and lessons learnt/recommendations proposed for revising legal regulations.

SOLUTION 1.4 INCREASE ODA FINANCING FOR BIODIVERSITY CONSERVATION

BACKGROUND

In the context of the global economy today, many countries have reduced the allocation of ODA funding for developing countries, including Viet Nam. Also, as Viet Nam graduates into a middle-income country, donor commitments are expected to decrease. Therefore, strengthening effective use of ODA has become an indispensable requirement.

For the period 2020-2030, no ODA funding has been committed yet, neither in general nor for biodiversity in particular. Accordingly, this proposed solution focuses on evaluation of the cost-effectiveness of projects using ODA funds in the period 2016-2020, to generate models/methods to increase ODA funds for biodiversity in the period 2020-2030.

The solution also emphasizes strengthening partnerships and coordination with the international donor community to increase resource efficiency and avoid duplication of investment.

DESCRIPTION

This solution aims to achieve two objectives:

1. Improve the cost efficiency of actual funds received i.e. get more out of every dollar received.
2. Increase the actual amount received.

The implementation of this solution also aims to secure that ODA funds received are used at the right way and on activities which, and in locations where, financing has the most impact and are aligned with national objectives. In order to achieve the expectation of improving cost efficiency of ODA financing, the following actions will be implemented within this finance solution:

1. Conducting evaluations of the efficiency of ODA utilization in biodiversity-related projects using ODA funds, to thereby propose solutions to improve the effective use of ODA financing.
2. Developing guidelines / manuals to ensure the effective use of ODA targeting biodiversity conservation.
3. Disseminating guidelines / manuals to ODA-funded biodiversity projects.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: It can be expected that until 2030, the level of ODA commitments by the international donor community for biodiversity will decrease, as Viet Nam develops into a middle-income country. However, between 2016 and 2020, environmental protection, resilience to climate change, and green growth still belong to the priority topics in Viet Nam's strategy for attracting ODA. The BER (UNDP, 2018) states that ODA-related financing for biodiversity accounts for 4.7% of the total ODA disbursed in the period 2011-2015, equal to a total of USD 402 million, or an annual average of nearly USD 150 million.

Legal framework: Currently, biodiversity projects using ODA funds are listed in the *Scheme On ODA Attraction, Management and Utilization of Other Preferential Loans of Donors, 2016-2020 Period* (Decision 251/2016/QD-TTg, dated February 17, 2016). Accordingly, the Government of Viet Nam has received USD

39.5 billion for 1,203 projects, of which projects on environmental protection, climate change resilience, and green growth belong to one of four priority categories. Major international donors are WB, ADB, IMF, EU, UNAIDS, and UNDP; bilateral donors include the Governments of Ireland, Great Britain, Austria, Belgium, Canada, Kuwait, Denmark, Germany, the Netherlands, South Korea, Italy, Norway, Japan, New Zealand, Australia, China, and Singapore. At the same time, the Government approved the *Support Program to Respond to Climate Change (SP-RCC) for the Period 2016-2020* (Decision 2044/2016/QD-TTg, dated October 27, 2016), which focuses on mobilizing ODA for mitigation and adaptation to climate change. For the period 2021-2030, there is no scheme to attract, manage, and utilize ODA and preferential loans from international donors.

Social and environmental benefits, and contribution to the National Biodiversity Strategy

In the current period (2016-2020), strengthening partnerships and coordination in the field of biodiversity conservation has been implemented as one of the solutions to increase financial resources for biodiversity conservation from a more diverse set of sources and donors, as stated in the NBS (see section 1.4). For the period 2021-2030, strengthening partnerships will continue to be an expected result. Partnerships that may be maintained in the coming period may include:

- The Joint Action Program on Biodiversity Conservation through the Viet Nam Development Partnership Forum (VDPF)
- The partnerships with the Critical Ecosystem Partnership Fund (CEPF)
- The Asian Protected Areas Partnership (APAP)
- The East Asian – Australasian Flyway Partnership (EAAFP)
- The Global Environment Fund (GEF)
- The Green Climate Fund (GCF)
- The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).

In addition to securing ODA financing for biodiversity for the period 2021-2030, the effective use of ODA funds for biodiversity projects can be improved through applying the proposed Solution 3.3 on Results-Based Budgeting.

Depending on priorities adopted by the Government of Viet Nam as well as global key policies and strategic directions agreed, the solution contributes to all three Specific Targets of the NBS: better quality of PAs, improvement in the quality of ecosystems and populations, including endangered, rare, and precious species, and the conservation of genetic resources.

Expected financial or economic benefits

For the period 2021-2030, there is no available data on ODA commitments, so it is not feasible to forecast how much ODA funding will be received/allocated for biodiversity.

At the same time, considering the continuing attention from the Government of Viet Nam to environmental protection and biodiversity conservation, as expressed in a broad set of legislative document, strategies, action plans, and other support documents, it is anticipated that to 2030 the

contribution of ODA financing in support of biodiversity conservation will be at least equal to ODA-related financing for biodiversity in the period 2011-2015 – on average USD 150 million per year.

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- MoNRE will be the focal point in coordination with MARD and line agencies for the development of projects and the evaluation of the effectiveness of using ODA resources for biodiversity.
- Management Units of biodiversity projects using ODA funds are responsible for implementing methods and solutions.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020	Evaluation of the efficiency of ODA utilization in biodiversity-related projects completed.
2021	Guidelines/manuals to ensure the effective use of ODA financing related to biodiversity completed.
2022	Guidelines/manuals disseminated to ODA-funded biodiversity projects.

3.2.2 Type 2: Solutions That Avoid Future Biodiversity Expenditures

SOLUTION 2.1 PROMOTE BIODIVERSITY OFFSET MECHANISMS

BACKGROUND

Biodiversity offsets[14] are a particular form of compensation for the loss of ecosystems, habitats, and species often resulting from large infrastructure and development projects that involve changes in land use. Biodiversity offsets involve exchanging a residual biodiversity loss at one place for a biodiversity gain at another with the objective to achieve no net loss of total biodiversity, or even a gain.

In October 2015, MoNRE developed and published the *Roadmap for the Development of a Biodiversity Offset System in Viet Nam*, including supplemental technical guidelines for biodiversity impact assessment.

DESCRIPTION

The roadmap for biodiversity offsets in Viet Nam outlines the steps that need to be taken to develop a compensation system, including technical methods for assessing habitat loss and compensation sites, financing mechanisms for development projects' money transfer to reimburse for biodiversity losses, service providers, legal requirements to ensure the system is applied, and institutional capacity to perform different tasks.

In particularly, the roadmap's recommendation is that MoNRE pursue a policy to develop a suitable biodiversity offset system for application in Viet Nam. In order to do this, it is recommended that:

1. A task force within MoNRE be set up to carry out the necessary studies to develop the biodiversity offset system.
2. A project be developed to receive funding from donors which would lead to the recommendations for the system to be piloted.
3. A policy for no net loss (NNL) of biodiversity be adopted.
4. Capacity building within MoNRE and service providers be implemented.
5. An effective institutional framework be developed.
6. Medium and long-term programs to achieve the objectives of the compensation plan and biodiversity offset be developed and implemented.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: Using a biodiversity offset mechanism contributes not only to addressing biodiversity pressures but it also to improving sustainable financing for conservation. It addresses the potential losses of biodiversity caused by the development of large infrastructure development and other land use

[14] The term offset comes from its use in the context of carbon trading, where a carbon offset is a reduction in emissions of carbon dioxide or greenhouse gases made in order to compensate for or to offset an emission made elsewhere.

changes. Biodiversity offsets are a compensation mechanism for these losses, and are an important part of the environmental impact assessment (EIA) toolkit.

Large infrastructure and development projects that involve a change in land use inevitably cause a loss of biodiversity, especially when located near PAs. However, even in natural and modified habitats that provide important ecosystem services, losses of biodiversity can be significant. Some areas may be rehabilitated, but there will be a residue of unavoidable losses. Biodiversity offsets provide a mechanism and financial support to compensate for these residual losses.

Policy/legal framework:

- The Convention on Biological Biversity (CBD): Viet Nam joined the CBD on 16 November, 1994. The CBD aims at biodiversity conservation, the sustainable use of biodiversity components, and the fair and equitable share of benefits from biological resource use. In its Articles 6 to 10, among others, the CBD specifies the general obligations of contracting parties for the conservation and sustainable use of biodiversity. In addition to the general obligations, Article 14 of the CBD clearly states the obligations of the contracting parties on "Impact Assessment and Minimizing Adverse Impacts" on biodiversity. Article 14 also refers to considerations of legal responsibilities relating to the restoration and compensation for biodiversity damages.
- The Constitution of Viet Nam (2013): For the first time, biodiversity conservation has been specified in Article 63 of the 2013 Constitution of Viet Nam, as follows:
    i. The State shall adopt environmental protection policies; manage and use natural resources in an efficient and sustainable manner; conserve nature and biodiversity; and take the initiative in preventing and controlling natural disasters and responding to climate change.
    ii. The State shall encourage all activities for environmental protection and the development and use of new energy and renewable energy.
    iii. Organizations and individuals that cause environmental pollution, natural resource exhaustion, or biodiversity depletion shall be strictly punished and shall rectify and compensate for damage.
- Other relevant legal documents on environment and natural resources: Biodiversity conservation is provided for in other legal documents such as the Law on Environmental Protection, Law on Biodiversity, Law on Forest Protection and Development, and Law on Fisheries. Among these laws, biodiversity is specified most comprehensively and broadly in the Law on Environmental Protection in relation to other environmental components (land, water, air, sound, light, etc.); Article 35 of the Law on Environmental Protection (2014) mentions firstly biodiversity offsets in the provisions, stating that "Investigation, assessment and planning of natural resource use must be implemented in accordance with the law". The Law on Forest Protection and Development also has strict provisions on changing use purposes of special-use forests, reducing the forest area.
- Circular 27/2015/TT-BTNMT provides for the detailed structures and contents of reports on strategic environmental assessment (SEA) and EIA, requiring EIA reports to describe the current status of biological resources, impact assessment of projects on "floristic composition,

wild animals, affecting sensitive ecosystems, degrading physical and biological environmental components; biodiversity change." The Circular also specifies that EIA reports should mention environmental supervision, including "supervision of change of rare animals and plants in areas for project implementation and areas being negatively affected by projects." Annexes of the Circular specify requirements on biodiversity in preparing EIA reports such as requirements on status assessment of biological resources, requirements on consultation on environmental impacts including impacts on ecosystems and biodiversity, and measures to mitigate adverse impacts on ecosystems and biodiversity (Annex 2.1 and 5.2).

Thus, some laws of Viet Nam are related to biodiversity offsets. More research is needed, however, on the policy, the implementation of laws, and provisions to develop specific regulations necessary for implementing biodiversity offsets in Viet Nam.

Social and environmental benefits, and contribution to the National Biodiversity Strategy

The vision for the Road Map is that a biodiversity offset system will be established and legally recognised in Viet Nam by 2025 and be fully operational by 2030. The goals of the Road Map include:

1. An enhanced understanding of the concepts and current good practices around biodiversity offsetting amongst policy makers, planners, developers, and decision makers.
2. The use of biodiversity offsetting as a policy and consenting tool, to be endorsed when the Law on Biodiversity (2008) will be revised, as well as in future new EIA laws and regulations.
3. Development of a practicable system for biodiversity offsetting in Viet Nam, with proven methods and financing mechanisms trialled and piloted.
4. Building capacity of relevant agencies, developers, and biodiversity conservation organisations to implement the offset system.

Implementation of biodiversity offset brings benefits:

- *Better conservation.* A common argument for offsets is that they help conserve areas of higher biodiversity value compared to the biodiversity being lost. For instance, if a company wants to develop an area of relatively minor biodiversity value, the offset it undertakes could create or protect an area of greater biodiversity value. Whether this can be achieved in practice will depend, among other things, on how flexibly offsets are interpreted and on whether all relevant stakeholders agree that what is being gained is of equal or greater value than what is lost.
- *Cost-effective conservation.* In addition to more or better conservation, offsets could help make the best possible use of money spent for conservation. They can help focus funds on conserving and protecting biodiversity and ecosystem services where they are most needed.

Pending instructions on spending priorities of offset finance resources generated, this solution has the potential to contribute to all three Specific Targets of the NBS: better quality of PAs, improvement in the quality of ecosystems and populations, including endangered, rare, and precious species, and the conservation of genetic resources.

EXPECTED FINANCIAL OR ECONOMIC BENEFITS

The reasons that different stakeholder groups have for supporting biodiversity offsets include:

Government

- The government agencies involved with management of natural resources and environmental impacts will support offset measures to address impacts from development on biodiversity as well as strengthen biodiversity conservation, e.g. MoNRE.
- Ministries with responsibilities for PAs and PA managers will benefit from additional sources of funds for managing these areas more effectively, e.g. MARD and MoNRE.
- Ministries responsible for development of different sectors such as hydropower, roads and transport systems, and industrial and special economic zones will be able to use biodiversity offsets as a measure for compensating for biodiversity losses resulting from their large infrastructure projects.

Private sector

- Private sector companies will also benefit from biodiversity offsets because without such a mechanism it has often been difficult for them to provide realistic compensation for the impacts caused. Increasingly, the credibility and licence to operate for companies such as the mining, cement and the petrochemical industries is dependent upon good environmental practices. Good biodiversity impact assessments and biodiversity offsets allows such companies to understand the risks to their companies from losses of biodiversity and to improve their reputation, especially internationally through focused offsetting.
- Access to finance for such companies may be dependent upon having a biodiversity offset scheme in place, e.g. from International Finance Corporation (IFC) and Policy Bank.

NGOs and biodiversity research institutes

- International and national NGOs and research institutes in the field of natural resource management, conservation, and rural development could benefit from biodiversity offsets, because they have the expertise to carry out the necessary assessments and to formulate biodiversity action plans that form part of offset schemes.

Communities

- Communities that depend upon natural resources for their livelihoods stand to benefit from biodiversity offsetting which may be designed to protect the habitats and ecosystems which they use. Biodiversity offset schemes could be designed similar to the PFES mechanism in Viet Nam, where, for example, communities are paid to protect the forests in the watershed above hydropower dams.

Expected financial results. The Biodiversity Offset Roadmap in Viet Nam does not include a list of projects that may be suitable for biodiversity reimbursement in the period 2020-2030, so it is not possible to predict the financial revenues generated when this solution is applied.

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- A Task Force of MoNRE will need to conduct some studies to develop the biodiversity offset system:
    1. *Biodiversity offset assessment methods*: A study on assessment methods will contribute to the design of the system. After completion and approval of the system, the study will form the basis for the development of guidelines.
    2. *Assessment of the most suitable biodiversity financing mechanisms with recommendations*: This study would consider the suitability of existing methods for financing offsets, e.g. through contributions to the Viet Nam Environmental Protection Fund (VEPF), a mechanism similar to the Forest Protection Fund or PFES, direct financing from the developer to an offset service provider, or a market mechanism allowing the buying and selling of offsets. Recommendations would be provided for the most appropriate financing mechanism applicable in Viet Nam, together with requirements for setting it up.
    3. *Legal review of existing and required laws and regulations for biodiversity offsets*: With a clearer picture of the offsetting system, assessment methods, and financing mechanisms, a legal review is needed to identify the changes that will be required to existing legislation or for new laws and regulations that need to be developed. The review should also cover assessing the proper legal baseline for monitoring of schemes, ensuring compliance, enforcement, and penalties. This legal review should include and contribute to the revisions of the Laws on Forestry and the Law on Fisheries and should be linked closely with the revision of the Law in Biodiversity (2008). Initial drafts of the new laws and regulations should be prepared.
    4. *Institutional and capacity assessment*: With the offsetting systems and financing mechanisms clearly described, a study of the institutional capacities to implement biodiversity offsets should be carried out.
- Inter-ministerial Task Force: With the systems developed by the MoNRE Task Force, an Inter-ministerial Task Force including all relevant ministries should be established to begin trialling and piloting biodiversity offset schemes. Relevant ministries include MoNRE, MARD, MoIT, MoT, MoF, biodiversity research institutes and agencies.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020	Prime Minister Decision to implement pilot projects on biodiversity offsets.
2020-2021	Preparation of guidelines for pilot application.
2020-2025	Training programmes.
2021-2024	Application of biodiversity offsets in 3 pilot schemes.
2022-2024	Review of implementation and recommendations.
2023-2025	Revision of regulations and guidelines.
2023-2025	Preparation of biodiversity offset legislation and approval.
2025-2030	Roll out of biodiversity offsetting in Viet Nam.

3.2.3 Type 3: Solutions That Deliver Financial Resources More Effectively and Efficiently

SOLUTION 3.1 APPLY AN ENVIRONMENTAL ACCOUNTING SYSTEM

BACKGROUND

The System of Environmental Economic Accounting (SEEA) is an internationally agreed statistical framework for the compilation of measures about the environment and their interactions with the economy. The SEEA Central Framework was adopted by the UN Statistical Committee in 2012 as an international statistical standard recommended to countries for implementation. From this SEEA Central Framework, there are many SEEA subsystems which have been tested in some countries, such as SEEA for water (SEEA-Water) and SEEA for Land (SEEA-Land).

Viet Nam is using the System of National Accounts (SNA), a system of accounts and systematic tables of statistics to describe and analyze basic economic phenomena ranging from production and consumption to accumulation of wealth of the economy. SNA reflects the process of generating revenue from production, distribution of revenue, use of revenue, and transfer of revenue to outsiders. The SNA does not reflect many kinds of valuable material resources/products into economic accounting, because these materials are not exchanged or traded in the market, or only traded at low prices (such as water resources, natural forests, etc.). The SNA does not account for many services provided by the environment (watershed protection forests, climate regulation, carbon absorption, water regulation, etc.), since these services are difficult to value in a manner consistent with the accounting principles. SEEA attempts to overcome some of the above shortcomings of the SNA, including:

- Describing the relationship between human activities and the environment.
- Including environmental assets.
- Including both material and non-material benefits.
- Presenting environmental assets in two aspects: monetary and physical forms.

Currently, there are accounting studies and experiments on SEEA carried out by some research institutions in Viet Nam and by PAs (such as Pu Mat NP), but the accounting under SEEA should have a specific roadmap to be applied in Viet Nam.

At the same time, the United Nations Statistical Commission has continuously updated and completed the SEEA methodology. In addition, the SEEA Experimental Ecosystem Account (SEEA-EEA) which includes many of the vital services provided by the environment, has not yet been adopted. Since 2012, SEEA has been developed in subsystems, such as SEEA for Water, SEEA for Land, SEEA for Ecosystem Services, SEEA for Minerals, and SEEA for Marine Resources. Therefore, the application of SEEA in Viet Nam will need to wait for more complete guidelines from the United Nations Statistical Commission.

DESCRIPTION

The proposal aims to assist Viet Nam in preparing to apply SEEA in the future, possibly after 2025. This solution includes the following major actions:

1. The General Statistics Office (GSO) cooperates closely with the United Nations Statistical Commission to contribute to the completion of SEEA Central Framework and SEEA subsystems for sectors.
2. The GSO and research institutions carry out activities to introduce/disseminate the SEEA to provinces and relevant agencies and pilot application of SEEA in selected provinces and PAs.
3. The piloting phase will be evaluated, providing inputs for adjusting SEEA methods of the United Nations Statistical Commission in accordance with the conditions of Viet Nam.
4. The legal regulations and institutional arrangement will be developed to ensure the application of SEEA (including developing capacity for staff at all levels in the national statistical system and relevant agencies; technical and technological infrastructure and other specialized software).

ECONOMIC AND/OR POLICY CONTEXT

Economic context: The SEEA comprises 2 components: Group of Physical Asset Accounts and Group of Monetary Asset Accounts.[15]

I. Physical Asset Accounts are comprised of three categories – Ecosystem Extent Accounts, Ecosystem Condition Accounts, and Ecosystem Services Supply Accounts – all of which are covered in further detail below.

1. *Ecosystem Extent Accounts* include information on spatial areas containing a combination of biotic and abiotic components and other characteristics that function together as well as extent ecosystem assets that include integrated spatial data (GIS), comprising layers on: (i) Land cover: forests, wetlands, lakes, etc.; (ii) Use and frequency of use: agriculture, forestry, PAs, etc.; (iii) Ownership: business purpose, private sector, government; Data is classified into spatial units; National coverage has a high resolution (30m-100m, maximum 500m) and involves at least 2 stages (changing over time). The recording unit is hectare, and Ecosystem Extent Accounts record the monetary value of opening and closing stocks of all ecosystem assets within an ecosystem accounting area and additions and reduction to those stock.
2. *Ecosystem Condition Accounts* reflect the overall quality of an ecosystem asset in terms of its characteristics. Ecosystem Condition Accounts present detailed condition solutions in terms of space for each characteristic: (i) vegetation, (ii) biodiversity (diversity of indicators and variety of species), (iii) soil, (iv) water, (v) carbon, (vi) air, and (vii) total measures (e.g. heterogeneity). The selected Ecosystem Condition Accounts reflect the ability to create services and are summarized in the form of indicators. Ecosystem Condition Accounts change over time (accounting stages) and their attributes change due to motivations (of nature and humans).
3. *Ecosystem Services Supply Accounts* demonstrate the physical flow of "final" (or supply) ecosystem services from ecosystems to beneficiaries and are used directly (or impacted) by humans.

II. Monetary Asset Accounts are comprised of Ecosystem Supply and Use Accounts and Ecosystem Monetary Accounts.

[e] United Nations Statistical Commission (2018).

Once the SEEA is put in operation, it helps to inform policy makers about the contribution of ecosystems to human prosperity, assess the trade-off between development and conservation, and integrate standard economic production measures in SNA.

Policy/legal framework:

- CBD (Goal 2) (1992), Agenda 21 (Rio) (1992), The Future We Want (Rio+20) (2012), Agenda for Sustainable Development and the SDGs (2015 – 2030)[16] serve as the basis for SEEA in Viet Nam.
- The *Viet Nam Sustainable Development Strategy for 2011-2020* states: "develop and carry out green growth model, ensure the development of low-carbon economy. Design an environmental-economic cost accounting system and add environment and social aspects to the SNA."
- Resolution 24-NQ/2013/TW of the Central Executive Committee on active response to climate change and strengthening natural resource management and environmental protection indicates: "gradually identify and assess values, set up accounts and perform accounting in the economy for important natural resources of the country".
- The *National Green Growth Strategy for 2011-2020 With Vision to 2050* states: "restore and develop natural capital resources, encourage participation of all economic sectors to invest in eco-service infrastructure, conservation areas and restoration of degraded ecological systems; and formulate the green accounting system through valuation of natural resources".
- The *National Strategy on Environment Protection to 2020, Vision to 2030* states: "speed up the application of economic mechanisms and tools in conformity with market economic regimes in order to realize macro manipulations of development activities towards environmental friendliness, especially through tax, fee, security, payment for environment services, and natural capital accounts."

Social and environmental benefits, and contribution to the National Biodiversity Strategy

Once SEEA is applied, it will be possible to delineate and analyze how each sector is using the different ecosystem services (including biodiversity). This will provide important information to macro-economic decisionmaking that appropriately takes ecosystem services and the distribution of their benefits into account.

Expected financial or economic benefits

SEEA is a tool that provides indirect financial or economic benefits, with the aim to create a strengthened enabling framework to support the issues of good governance and promoting the implementation of green economic development.

[16] United Nations Statistical Commission (2018).

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- The SEEA implementing agency is the GSO because this Department is responsible for national accounts.
- Research institutions with expertise on measuring the values of biodiversity would be the units to provide inputs to the GSO.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020-2022	GSO and research institutions carry out activities to introduce/disseminate the SEEA to provinces and relevant agencies.
2020-2025	GSO, in cooperation with the United Nations Statistical Commission, completes the SEEA Central Framework and SEEA subsystems for sectors.
2020-2025	SEEA approach is piloted in selected provinces and PAs.
2025-2027	Pilot phase is evaluated; SEEA approach of the United Nations Statistical Commission is adapted in accordance with the conditions of Viet Nam.
2027-2029	Legal framework is adapted; enabling conditions are established (capacity for staff at all levels in the national statistical system and relevant agencies; technical and technological infrastructure and other specialized software).
2030	SEEA is applied more widely to provide information on the value of forests and biodiversity to support policy decision making.

SOLUTION 3.2 ADD A STATE BUDGET INDEX CODE FOR BIODIVERSITY CONSERVATION

BACKGROUND

A systematic process of planning, budgeting, and monitoring expenditures for biodiversity is a very important factors in implementing, controlling, and assessing the effectiveness of the government's policies related to this field.

This solution aims to add a dedicated code to account for expenditures on natural resources and biodiversity conservation in the Viet Nam State Budget Index. At present, the State Budget Index does not clearly and separately account for biodiversity spending; instead, biodiversity finance considerations are only integrated as environmental protection expenditure (Account 271-Natural Resources and Biodiversity Conservation).

The State Budget Index is a table which classifies revenues and expenditures of the state budget according to certain criteria and methods as a basis for operation, management, settlement, control, and analysis at all levels of government. A complete system of the State Budget Index must include all transactions of the government by types of organizations, technical and economic sectors, and by economic purposes of each territory or administrative region of the State.

The current system of Viet Nam State Budget Index is being applied for estimate making; approval, allocation and assignment of the estimates; executing, accounting for, and settling state budget revenues and expenditures, including chapter; type, account; entry, sub-entry; national programs, targets, and projects; State budget sources; and State budget levels. In particular, the Chapter is coded according to each government level (central, provincial, district, and communal), the Type is used to classify state budget expenditures by the budget expenditure domain, the Account is used to detail the Type and to classify state budget revenues and expenditures according to the national economic sectors, and the Entry is used to classify state budget revenues and expenditures according to economic themes of the State budget collecting and spending regimes and policies. The Sub-entry, which elaborates the Entry, is used to itemize the state budget revenues and expenditures according to the management objects in each Entry. In addition, the National Programs, Targets, and Projects in the State Budget Index are categorized based on the state budget spending tasks on them and on others which are tracked separately.

In terms of biodiversity conservation, it is institutionalized in the Constitution (2013), the Law on Biodiversity (2008), the Law on Environmental Protection (2005, amended in 2014), the Law on Forest Protection and Development (2004, amended in 2017), and the Law on Fisheries (2003, amended in 2017), while also specifically mentioned in some important strategies and policies such as:

- The *National Biodiversity Strategy to 2020 With Vision Toward 2030* (PM Decision 1250/2013/QD-TTg, dated July 31, 2013).
- The *Master Plan on Biodiversity Conservation in the Whole Country to 2020 With Orientation Toward 2030* (PM Decision No. 45/2014/QD-TTg, dated January 8, 2014).
- The *Strategy for Management of Systems of Conservation Forests, Marine Reserves and Internal Water Reserves of Viet Nam to 2020, With Vision Toward 2030* (PM Decision No. 218/2014/QD-TTg, dated February 7, 2014).

- *Planning for Conservation Forests System Across the Country to 2020 With Vision Toward 2030* (PM Decision No. 1976/2014/QD-TTg, dated October 30, 2014).

DESCRIPTION

This solution aims to fully determine a separate budget line for natural resources and biodiversity conservation in the State Budget Index. The government at all levels will get a comprehensive and reliable picture of state efforts to implement biodiversity conservation policies and ensure efficient budget allocation. Development partners can also use this index to budget, explain, and report on the financial sources for biodiversity conservation provided to Viet Nam. A consistent information system of state budget expenditures provided by the State Treasury will reduce the cost of collecting and processing information for biodiversity conservation expenditure management. This is also the basis for ensuring accountability in the allocation, management, and use of the state budget for biodiversity.

In order to achieve those results, the following actions are outlined:

1. A targeted study on international experiences in establishing a dedicated budget line for natural resources and biodiversity conservation in the state budget codes system will be implemented.
5. MoNRE will be the focal point to coordinate with MARD, MPI, MoF, and other ministries (if any) to develop a guideline on classification of budget expenditures (including investment expenditures and regular expenditures) on Natural Resources and Biodiversity Conservation.
6. Ministries, sectors, and provinces will be trained and guided on state budget-using agencies to improve the quality of proposals and explanatory notes on investment and recurrent expenditure estimates for biodiversity conservation.
7. MoF will issue a circular guiding the State Budget Index to add the codes of Natural Resources and Biodiversity Conservation.
8. The State Treasury will account the expenditures on Natural Resources and Biodiversity Conservation under the new code of the State Budget Index.
9. MoNRE will periodically use budget expenditure data taken from TABMIS to evaluate state budget expenditure for biodiversity, highlighting actual spending for tasks/projects/activities planned. This assessment is an important basis for the government to determine a certain percentage of the budget for biodiversity objectives in each specific period and direct the ministries, branches, and local authorities to ensure budget allocations in order to achieve the objectives of the NBS.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: Currently, 989 agencies at the central and provincial levels possess government budget codes. According to the PIR (UNDP, 2018), 219 conservation areas and 38 biodiversity conservation centres (botanical and wild animal rescue centres), accounting for about 2.3 million hectares of land and sea, are classified officially in the *National Biodiversity Master Plan* (BMP) *to 2020 With Vision Toward 2030* (PM Decision 45/2014/QD-TTG, dated January 8, 2014). However, these establishments are not included in the list of 989 agencies coded by the State Budget Index. According to the index, areas, natural resources, and biodiversity conservation activities are coded with 271 under the code 250 (state budget for environmental protection expenditures). However, expenditures on biodiversity conservation can also

be hidden in the state budget expenditure codes for economic activities (Type 280), such as for agriculture (Account 281), forestry (Account 282), and fisheries (Account 284). Therefore, without dedicated budget code for adequate expenditures on biodiversity conservation in the above accounts, it is difficult to collect statistics of expenditure on biodiversity conservation, as well as to identify the financial needs for this activity.

Legal framework:

- The State Budget Law (2015) requires the state budget to be managed based on performance.
- Decree 16/2015/ND-CP, dated February 14, 2015 (Decree 16), makes provisions on the autonomy mechanism of public non-business units.
- Decree 32/2019/ND-CP, dated April 10, 2019, stipulates assignment, ordering or bidding for provision of public products and services using the state budget from regular expenditure sources. In particular, natural resources and biodiversity conservation services are required to be implemented by assignment, ordering or bidding.
- Decree 32/2019/ND-CP, dated April 10, 2019, stipulates "assignment, ordering or bidding for the provision of public products and services using the state budget from regular expenditure sources."
- The State Budget Index system which was revised by MoF in 2016 (Circular No. 324/2016/TT-BTC) codes the state budget expenditure lines according to organizations and sectors/activities. It also has codes for expenditures on natural resources and biodiversity conservation in the type of environmental protection expenditures.

Social and environmental benefits, and contribution to the National Biodiversity Strategy

In order to classify state budget expenditures for biodiversity, competent authorities must make clear definitions on tasks, projects, and activities which aim at biodiversity conservation. On that basis, the sectors of agriculture, forestry, fisheries, environmental resources, etc. will identify specific programs, tasks, projects, and activities on biodiversity when they make mid-term and annual development plans. This is also the basis for agencies using the state budget to make detailed explanations about estimation of the projects, tasks, and activities. The State Treasury controls and verifies the spending against the estimates of the budget-using agencies in the Treasury and Budget Management Information System (TABMIS) and accounts into the Account of Natural Resources and Biodiversity Conservation in TABMIS when established.

Expected outcomes:

1. To facilitate the collection of data about state budget spending on natural resources and biodiversity conservation from the TABMIS of the State Treasury for the purpose of periodical monitoring and reporting about state budget spending on the targets of the National Biodiversity Strategy.
2. To promote the transparency and enhance the accountability of the parties in state budget allocation and spending, forming the basis for a request to the governments for prioritized spending on biodiversity.

3. To enhance Viet Nam's readiness in accessing, managing, and coordinating international financial flows for biodiversity.

EXPECTED FINANCIAL OR ECONOMIC BENEFITS

This solution has no basis to quantify specific financial results. However, if there is a code of the state budget spending on biodiversity conservation in the State Budget Index, it will be a technical foundation to integrate planning and budgeting with biodiversity, supporting more harmonious decision making in line with policy implementation.

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- MoNRE will be the focal point to coordinate with MARD, MPI, MoF, and other ministries (if any) to issue a decision guiding the classification of state budget expenditures (including investment expenditures and regular expenditures) on natural resources and biodiversity conservation. This Guideline aims to equip ministries, sectors and localities with tools to classify, allocate, use, and account to the state budget for proposed biodiversity objectives.
- MoF will issue a circular about the State Budget Index and add the code of Natural Resources and Biodiversity Conservation in the Type of spending on economic activities (Type 280), such as agriculture (Account 281), forestry (Account 282), fisheries (Account 284), and other fields (if any).
- Ministries, sectors, and provinces will train and guide state budget-using agencies to improve the quality of proposals and explanatory notes on investment and recurrent expenditure estimates for biodiversity conservation.
- The State Treasury will conduct the accounting under the code of Natural Resources and Biodiversity Conservation when the unit makes payment for spending on biodiversity conservation.
- Ministries, sectors, and provinces will use the data from the State Treasury to estimate expenditures for biodiversity conservation. The consistency among financial mechanisms, budget estimates, and policy implementation will be enhanced, promoting more effective and harmonious implementation of the National Biodiversity Strategy.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020	Study on international experiences in establishing a dedicated budget line for natural resources and biodiversity conservation in the state budget codes system completed.
2021	Guideline on classification of budget expenditures (including investment expenditures and regular expenditures) on Natural Resources and Biodiversity Conservation developed.
2022	Capacity building (training/coaching) program completed for all state budget-using agencies to improve the quality of proposals and explanatory notes on investment and recurrent expenditure estimates for biodiversity conservation.
2023	Circular guiding the State Budget Index to add the codes of Natural Resources and Biodiversity Conservation issued (by MoF).

2024 onwards	Expenditures on Natural Resources and Biodiversity Conservation under the new code of the State Budget Index accounted by the State Treasury.
2025 onwards	Budget expenditure data taken from TAMIBS used by MoNRE to monitor and evaluate the state budget expenditure for biodiversity.

SOLUTION 3.3 ADOPT RESULTS-BASED BUDGETING

BACKGROUND

According to the Organization for Economic Co-operation and Development (OECD, 2007), performance-based budgeting/results-based budgeting (RBB) is a method of budget management in which resources are allocated based on the measurement and assessment of performance results.

RBB is a general term referring to any budgeting method of a country in which budget efficiency information is used in the process of budget decisionmaking. This involves a combination of non-financial with financial information to help make decisions, management, and ensure accountability.

RBB implies a whole budget management system, not a specific budgeting method. There is no universal definition of RBB, but one can look at some of the following characteristics to determine whether a country's budget system is based on performance/results:

1. The national budget system is organized according to objectives, programs, and activities.
2. Outputs and results of each program and activities are specified.
3. The data measuring outputs and results which are integrated in budget documents are the (direct/indirect) basis to determine the budget to be allocated for each program and activities.
4. An information system on measurement (monitoring and evaluation) of outputs and results of each program and activities is developed.

In Viet Nam, Decree 163/2016/ND-CP (dated December 21, 2016) guiding the implementation of a number of articles of the State Budget Law stipulates results-based state budget management (Article 11, Article 13). According to Decree 163, the results-based management of the state budget defines that the estimation, allocation, disbursement, and settlement of the state budget is based on the clear determination of volume, quantity, and quality of the services and products to be delivered by expenditure units following technical standards and regulations.

DESCRIPTION

The solution engages the following major actions:

1. Develop and review a list of tasks, services, and products with direct or indirect objectives related to biodiversity conservation, which are covered partially or fully by the state budget; continue to develop economic and technical norms as a basis to apply RBB[17].
2. Apply tasks assignment and order the services/tasks/products with economic and technical norms in the biodiversity conservation units, first of all PA Management Boards.
3. Prepare conditions to apply this method nation-wide, especially building capacity for managing staff and provide for technical and technological infrastructure and specialized software to support the monitoring and/or evaluation on the level of task completion to provide information for the budget process.

[17] Currently, agencies such as MARD and MoNRE have been actively building the economic and technical norms, such as economic and technical norms for biodiversity monitoring, and preparing reports on the status of biodiversity in the national and provincial conservation zones.

4. Review/evaluate and adjust economic and technical norms.
5. Apply RBB by assigning tasks, ordering, and bidding to all of the biodiversity conservation units which are qualified enough to apply the budget management. Periodically (2 years and 5 years) MoNRE assesses the effectiveness and efficiency of the state budget for biodiversity to advise the Government to prioritize the allocation of budget to "worthwhile" tasks to achieve the biodiversity conservation objectives. This is also the basis for ensuring accountability of budget users.

Box 3 Development of procedures and standardized costs for RBB and biodiversity monitoring and reporting in PAs in Viet Nam

Annually, budgeting in support of the PA systems is based on calculations of inputs (staff, consumables, hardware, investments, etc.) needed as proposed by individual PAs as well as designated systemic management authorities at the national and provincial levels. Inputs are converted into budgets using the technical cost-norm (standardised costs) promulgated annually by MoF, relevant line ministries and subordinate departments, and provincial authorities, specifically PPCs. Accordingly, being based on management inputs, neither is it very easy to identify expenditures for achieving biodiversity targets as agreed in PA management plans, nor are impact indicators identified as means to assess success or failure of conservation finance, or, for that matter, sufficiency of financing allocated.

The State Budget Law 2015 requires ministries, departments, and localities to gradually apply RBB management, where currently most of them are managing their budget based on inputs and activities. This means that the agency with authority to allocate a budget must discuss with the PAs their mandate related to biodiversity protection and identify the specific output indicators and unit costs of each output tabled in their business plans. Accordingly, PAs are autonomous in the use of funds and bear all accountability for the implementation of activities and achieving output-based indicators related to biodiversity. Periodically, the funding agency will monitor and evaluate the delivery of the agreed results that PAs committed to produce according to the "economic contract" between the two parties. This new management will motivate PAs to implement biodiversity objectives in accordance with allocated funds.

In order to implement this new budget management process, the first and most difficult step for competent authorities is the enactment of the economic-technical norms and the development of procedures and standardized costs applied for biodiversity conservation tasks.

The objective of this Solution is to develop standardized costs applicable for all PAs and relevant public organizations in Viet Nam engaged in biodiversity monitoring and reporting.

The expected project result is that the standardized costs for biodiversity monitoring and reporting are promulgated by MoNRE in accordance with the process and indicators of biodiversity monitoring and reporting issued by BCA/MoNRE. The expected outcome is that RBB will be applied in the wider PA system, resulting in more efficient and effective use of government allocated budgets for biodiversity, on the impact of which the PAs will submit biodiversity reports every three years, as stipulated in the Law on State Budget (2015) as well as the Viet Nam Law on Biodiversity (2008).

The standardized costs, once promulgated, would help to ensure transparency and accountability in utilizing the allocated State Budget, enabling appropriate resources and effective implementation of Law on Biodiversity. In BIOFIN's terms: delivering better.

ECONOMIC AND/OR POLICY CONTEXT

Economic context: There are some outstanding advantages in RBB in comparison with the traditional budgeting based on inputs:

1. Improving the performance of the government's policies.
2. Providing valuable information on government's goals and priorities and the way of different programs to contribute to achieving these goals.
3. Providing a detailed signal of the tasks, projects, and activities which can be performed well, thereby improving the planning of governments.
4. Improving transparency by providing information on the result of budget use to elected bodies and people.
5. Developing the potential to improve efficiency of the state budget allocation and spending.

In other words, through RBB management, the public sector can:

- *Do the right thing*: actions which are consistent with the strategy and enhance effectiveness.
- *Do it the right way*: increase efficiency in the organization.
- *Enhance the public's trust* due to better communication and consultation with the public.

RBB management, on the one hand, impresses to give autonomy in using "budget packages" to the units, while on the other hand focuses on evaluating "budget-use performance" in order to ensure accountability of using the allocated state budget.

Thus, if RBB is applied for biodiversity conservation, it will give the related agencies, especially the PAs, more autonomy in using the state budget and allow them to employ qualified human resources.

Legal framework:

- The 2015 State Budget Law, approved by the National Assembly (No. 83/2015/QH13, taking effect from January 1, 2017, and replacing the 2002 State Budget Law), allows public service organizations, including conservation facilities, to use revenue from service provision along with government budgets allocated to cover operating costs, including increasing compensation for employees.
- Decree 163/2016/ND-CP (dated December 21, 2016), guiding the implementation of several articles of the State Budget Law, stipulates results-based state budget management. State-budget expenditure units that apply RBB should meet the following conditions:
    i. The volume, quantity, quality, and service completion time of their services/products can be clearly defined.
    ii. The budget estimation is based on the economic and technical norms, cost norms, or refers to the cost of production of the similar services/products in similar conditions (including taxes, fees, and charges payable according to the provisions of law).
    iii. Indicators and mechanisms for performance monitoring and evaluation are applied.

iv. There is an agreement in writing between the assigning authority and the implementing agency.

According to Decree 163, the results-based management of the state budget implies that the estimation, allocation, disbursement of state budget is based on the clear determination of the volume, quantity and quality of the services and products to be delivered by expenditure units according to technical standards and regulations.

- Decree 141/2016/ND-CP (dated October 10, 2016) regulates the autonomy mechanism of public non-business units in the fields of economics and others, including natural resources conservation and environmental protection entities. This decree allows organizations to use the revenue from the provision of services in accordance with the regulations related to operational costs. Decree 141 opens a window of opportunity for public non-business units to use the income generated to increase incentives for their staff and hence increase their working motivation.
- Recently, Decree 32/2019/ND-CP (dated 10 April 2019) of the Government stipulates the assignment, ordering, or bidding to provide public products and services using the state budget from recurrent expenditure source. Public non-business services using state budget funds, including nature conservation and biodiversity services, shall be implemented by the following modes: assigning tasks, placing orders, or bidding. These regulations help strengthen administrative reform and create favourable conditions for organizations to implement performance-based management in natural resources and environment sector.

SOCIAL AND ENVIRONMENTAL BENEFITS, AND CONTRIBUTION TO THE NATIONAL BIODIVERSITY STRATEGY

The objectives and targets of the Law on Biodiversity are further specified in the *National Strategy on Biodiversity to 2020 with a Vision Toward 2030*, showing prioritized objectives and main tasks to achieve the objectives. This will be the basis for MoNRE and the PPCs to review and submit to competent authorities for approval a list of public service delivery units using the state budget, including the services to be covered fully and partially by the state budget.

Currently, according to PM Decision 1990/2017/QD-TTg (dated December 11, 2017) on *Promulgating the List of Public Professional Services Funded by the State Budget Under the State Management of the Ministry of Natural Resources and Environment*, the budget allocation for state management on Natural Resource and Biodiversity Conservation covers the following four categories:

1. Master Plan of Nation-Wide Biodiversity Conservation.
2. Monitoring of national biodiversity.
3. Formulating lists and programs on conservation of endangered, precious, and rare species which are prioritized for protection.
4. Compiling Viet Nam's Red Data Book.

MoNRE continues to review the list of spending tasks in the National Biodiversity Strategy from funding sources for environmental protection, economic, scientific, and training tasks; removes completed tasks from the list; and clarifies the tasks that need to be continued as well as the tasks to be prioritized and covered by (central or provincial) funding sources.

On the basis of the list of spending tasks, MoNRE in coordination with specialized ministries, especially MARD, develops economic and technical norms on public services using the state budget for the competent authorities to assign tasks, order, or bid for the services. The economic and technical norms are the basis to determine unit prices which are approved by competent authorities. The content of assigning tasks, ordering, or bidding includes:

1. Quantity and volume of public non-business services or products ordered.
2. Quality of public non-business services or product.
3. Implementation and completion time.
4. Unit price and ordered price.
5. Method of payment and settlement; method of checking, approval, and handover of the services/products.

Expected outcomes

- *For the government:* when adopting priority programs/projects related to biodiversity, the Government will have a basis to allocate financial resources to achieve the set objectives, instead of the current practice of allocating state budget based on the number of staff working in a spending unit.
- *For the line management agencies*: the competent authorities are encouraged to change their budget allocation methods, which are currently based on inputs/activities. They are motivated to allocate a budget to their subordinate agencies based on a contractual agreement stating quantitative deliverables and expected results which the state-budget spending units should achieve. This contractual agreement will serve as basis for acceptance of services/products, monitoring, and evaluation conducted by management agencies.
- State budget spending units who are tasked with biodiversity conservation have the autonomy to decide on budget expenditure, and as such are motivated to manage financial and human resources in an "enterprise-like" manner to improve the quantity and quality of their services/products at reasonable costs.
- The public will have a "voice" in monitoring the use of state budget allocated for biodiversity conservation.

In summary, RBB is expected to ensure more effective and efficient budget allocation related to biodiversity conservation.

EXPECTED FINANCIAL OR ECONOMIC BENEFITS

There is no basis to quantify the specific financial results of this solution. However, if results-based state budget management is implemented, it will achieve a more effective allocation and linkages between the budget allocations and strategies and plans adopted for biodiversity conservation. In particular, the solution helps the state budget-using units pay attention to economy, efficiency and effectiveness of budget spending instead of “spending money.”

RESPONSIBLE PARTIES AND THEIR RESPECTIVE ROLES

- MoNRE will be the focal point to coordinate with MARD, MPI, MoF, and other ministries (if any) to prepare a list of public services or state budget tasks to ensure full costs of services and tasks implementation not included in the price according to the price-making plan of Decree No. 16/2015/ND-CP and Decree No. 141/2016/ND-CP (dated October 10, 2016). The decrees regulate the autonomy mechanism of public non-business units in economic and other fields.
- MoNRE will coordinate with specialized ministries, especially MARD, to develop technical-economic norms on public non-business services using the state budget.
- MoNRE will assume the prime responsibility for, and coordinate with, MoF in reviewing and agreeing on spending norms for biodiversity conservation tasks and projects (or work items of project tasks which have not had economic-technical norms yet).
- MoF will base itself on the economic-technical norms to determine the maximum prices for purchasing public non-business products and services using the central budget, which are ordered and planned by competent state agencies.
- Ministers of ministries will set specific prices for public non-business services, goods, and services ordered by competent state agencies, and assign plans to use the state budget under the Ministry's management scope according to the price frame and maximum and minimum price stipulated by MoF.
- MoF will coordinate with ministries and central agencies in examining the performance of tasks, ordering, and bidding for the supply of public products and services under the central budget's spending tasks.
- PPCs will regulate prices of public non-business products and services using local budgets.
- Local financial agencies will coordinate with local specialized agencies to inspect the performance of tasks, ordering, and bidding for the supply of public products and services under the local budget's spending tasks.
- The State Treasury at all levels, based on the decision on task assignment, will coordinate ordering and bidding; the estimates of competent authorities assigned; decisions and contracts for ordering and bidding; minutes of product acceptance; minutes of order acceptance; minutes of contract liquidation, control expenditures, and make payments for the expenditures of the task assignments, ordering public services, and products of public non-business units.

TIMELINE AND MILESTONES FOR POLICY ACTION

Year	Milestone
2020	List of tasks, services, products with direct or indirect objectives related to biodiversity conservation developed as a basis to apply RBB.
2021-2025	Task assignment and ordering of services/tasks/products applied with economic and technical norms in the biodiversity conservation units, first of all PA Management Boards.
2021-2025	Conditions to apply RBB nation-wide prepared.
2025	Economic and technical norms reviewed/evaluated and adjusted.
2026	RBB applied to all biodiversity conservation units which are qualified to apply the RBB.

3.4 Implementation Timeline of the BFP

Solution	Implementation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1.1: Generate revenue from sustainable tourism and collect service fees in PAs.	Assess the capacity of PAs possessing ecosystems with high biological diversity for offering tourism activities and assess all PAs to obtain accurate data on current revenues from services provided.	■										
	Provinces with PAs develop strategies or plans on local ecotourism.	■	■									
	All PAs develop Service Provision Plans, including a forecast on revenues from providing services to be aggregated and synthesized by line agencies, and assess the application of different prices and adjust the Financial Management Regulations of PAs with integrated revenues.		■									
	Prepare/develop human resources for ecotourism (especially communities participating in providing tourism services).		■	■	■							
	Build connections between tourism operators (people doing traditional tourism are less committed to biodiversity conservation) and managers of PAs and local communities.	■	■	■	■	■	■					
	Connect enterprises and communities that provide ecotourism services with the PMES authorities.						■					
	Assess the impact from ecotourism activities on biodiversity conservation levels in order to make recommendations on policy and legal adjustments, towards maximizing resources from tourism activities made available for re-investment in biodiversity conservation.							■				
	Adopt and apply relevant recommendations from the impact assessment mentioned above.								■	■	■	■

Solution	Implementation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1.2: Expand payment for ecosystem services to MPAs.	Complete a set of databases and thematic reports, summarizing PMES application tools and models.											
	Complete a set of criteria for identifying priority marine areas for the application of PMES in Viet Nam based on quantified values that are developed scientifically.											
	Pilot PMES programs in some provinces and propose the possibility and roadmap for PMES application in the network of Viet Nam's MPAs.											
	Develop a draft legal framework (Probably the Draft Circular on Guiding PMES).											
	Deploy the mechanism of PMES in the whole system of Viet Nam's MPAs.											
1.3: Promote public-private partnerships in biodiversity conservation.	Study, evaluate, and improve/complete the system of legal regulations on public investment and PPP investment, developing specific regulations on PPP related to biodiversity conservation.											
	Build a portfolio of biodiversity-related projects suitable for PPP investment to attract investment from the private sector, initially prioritizing infrastructure works such as access roads to PAs. This should be implemented based on capacity assessment studies of PAs as discussed in solution 1.1 to promote and encourage sustainable tourism.											
	Implement PPP investment projects and summarize the implementation experience for feasible models.											
	Select a number of biodiversity projects using ODA funds to evaluate the efficiency of ODA utilization, thereby proposing solutions to improve the effective use of ODA.											

Solution	Implementation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1.4: Increase ODA financing for biodiversity.	Develop guidelines/manuals to ensure the effective use of ODA related to biodiversity.											
	Apply guidelines/manuals to secure ODA funds for biodiversity projects.											
2.1 Promote biodiversity offset mechanisms.	Prime Minister Decision to implement pilot projects on biodiversity offsets.											
	Preparation of guidelines for plot application.											
	Training programmes.											
	Application of biodiversity offsets in 3 pilot schemes.											
	Review of implementation and recommendations.											
	Revision of regulations and guidelines.											
	Preparation of biodiversity offset legislation and approval.											
	Roll out of biodiversity offsetting in Viet Nam.											
3.1: Apply an Environmental Accounting System.	GSO and research agencies carry out activities to introduce/disseminate the SEEA to provinces and relevant agencies.											
	GSO cooperates closely with the United Nations Statistical Commission to contribute to the completion of SEEA Central Framework and SEEA subsystems for sectors.											
	Pilot application of the SEEA in some areas (provincial level), and some PAs.											

Solution	Implementation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Review/evaluate the piloting phase and adjust SEEA methods of the United Nations Statistical Commission in accordance with the conditions of Viet Nam.											
	Develop the legal framework and prepare applicable conditions (preparing capacity for staff at all levels in the national statistical system and relevant agencies; technical and technological infrastructure and other specialized software.											
	Apply integration of SEEA into SNA.											
3.2: Add a state budget index code for biodiversity conservation.	Study international experiences in establishing a dedicated budget line for natural resources and biodiversity conservation in the state budget codes system.											
	MoNRE will be the focal point to coordinate with MARD, MPI, MoF, and other ministries (if any) to develop a Guideline on classification of budget expenditures (including investment expenditures and regular expenditures) on Natural Resources and Biodiversity Conservation.											
	The ministries, sectors, and provinces will train and guide state budget-using agencies to improve the quality of proposals and explanatory notes on investment and recurrent expenditure estimates for biodiversity conservation.											
	MoF will issue a circular guiding the State Budget Index to add the codes of Natural Resources and Biodiversity Conservation.											
	The State Treasury will account the expenditures on Natural Resources and Biodiversity Conservation under the new code of the State Budget Index.											

Solution	Implementation	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	MONRE periodically uses budget expenditure data taken from TABMIS to monitor and evaluate the state budget expenditure for biodiversity.											
3.3: Adopt Results-Based Budgeting.	Develop and review a list of tasks, services, and products with direct or indirect objectives related to biodiversity conservation, which are covered partially or fully by the state budget. Continue to develop economic and technical norms as a basis to apply RBB.											
	Apply tasks assignment and order the services/tasks/products with economic and technical norms in the biodiversity conservation units, first of all in PA Management Boards.											
	Prepare conditions to apply this method nation-wide, especially building capacity for managing staff and provide for technical and technological infrastructure and specialized software to support the monitoring and/or evaluation on the level of task completion to provide information for the budget process.											
	Review/evaluate and adjust economic and technical norms.											
	Apply RBB by assigning tasks, ordering, and bidding to all of the biodiversity conservation units which are qualified enough to apply the budget management.											

.

.

4 CONCLUSIONS

This report has been developed based on a process of assessing the potential financial solutions for biodiversity that are appropriate for implementation in the Viet Nam context and consultations conducted with governmental stakeholders and international and local experts, following the guidance of the *BIOFIN Workbook* (2018).

The proposal of the eight most feasible financial solutions aims at contributing to the implementation of the National Biodiversity Strategy and achieving the targets adopted, as well as to the reduction or closing of the financial gap for biodiversity conservation for the period 2020-2030.

Although not meeting the expectation of providing any quantitative figure of the revenue expected to be generated, or savings to be made, by implementation of each of the proposed solutions, the report presents specific proposals for the most feasible solutions in the context of Viet Nam in the coming time.

In order to effectively implement the solutions, the in-charge agencies need to develop further detailed implementation plans for each solution, thereby specifying the required human resources and costs. The forecasting of expected financial results will then be more feasible.

REFERENCES

1. MoNRE (2015). *Report on the Current Status of the State Environment, Period 2011-2015*.
2. MoNRE (2015). *Roadmap for Biodiversity Offsets in Viet Nam*.
3. MoNRE (2013). *National Strategy on Biodiversity to 2020, Vision to 2030*. Issued with Decision No. 1250 / QD-TTg dated July 31, 2013.
4. Viet Nam Government (2012). *Viet Nam Sustainable Development Strategy for the Period 2011-2020*, Decision of the Prime Minister No. 432 / QD-TTg dated April 12, 2012.
5. Government (2016). Decree No. 120/2016 / ND-CP dated August 23, 2016, detailing and guiding the implementation of a number of articles of the Law on Fees and Charges.
6. Government (2018). Decree No. 156/2018 / ND-CP dated November 16, 2018, detailing a number of articles of the Forestry Law.
7. Dao Van Khiem and Bui Thi Thu Hoa (2016). "Analysis of Taxation of Natural Resources." Visit at http://www.vjol.info/index.php/DHTL/article/viewFile/27636/23542; access date October 30, 2018.
8. Le Van Hung (2013). "Payment for Ecosystem Services and Applicability in Viet Nam." *Journal of Science and Development*, volume 11, No. 3: 337-344.
9. OECD (2007). *Performance Budgeting in OECD Countries*. OECD Publication. Visit at http://www.oecd.org/gov/budgeting/performancebudgetinginoecdcountries.htm; access date 30/10/2018.
10. Pham Hong Luong (2018). "Payment of Viet Nam's Forest Environmental Services: Current Situations and Solutions." *Journal of Forestry Science and Technology*, No. 1 – 2018.
11. National Assembly (2015). Law on Fees and Charges No. 97/2015 / QH13, dated November 25, 2015.
12. National Assembly (2015). State Budget Law No. 83/2015 / QH13 dated June 25, 2015.
13. National Assembly (2016). Forestry Law.
14. Shah, A., & Shen, C. (2007). *A Primer on Performance Budgeting*. "Budgeting and Budgetary Institutions," 137-178.
15. Prime Minister (2016). Directive No. 14 / CT-TTg dated 10/5/2016 of the Prime Minister on the Implementation of the Law on Fees and Charges.
16. General Department of Forestry (2018). *Report of Ecotourism Activity Inspection at National Parks and Nature Reserves 2017 of Viet Nam Administration of Forestry.*
17. UNDP (2016). *The 2016 BIOFIN Workbook: Mobilizing Resources for Biodiversity and Sustainable Development*. The Biodiversity Finance Initiative. United Nations Development Programme: New York.
18. MoNRE (2008). *4th Country Report: Viet Nam's Implementation of the Biodiversity Convention*.

APPENDICES

Appendix 1 Criteria used to screen priority financial solutions

A. Rapid screening review and outcomes

B. Criteria and outcomes of the detailed screening

Appendix 1 Criteria used to screen priority financial solutions

A. Rapid screening review and outcomes

Criteria	Guidance for grading
(1) Potential for BD impact	(4) Very high impact on threatened/endangered types, ecosystem services and inhabitants (3) High impact on biodiversity and ecosystem services (2) Moderate impact on biodiversity and ecosystem services (1) Low impact on biodiversity and ecosystem services (0) Negligible or no impact
(2) Scale of financial opportunity	(4) Potential to mobilize or save a huge amount of resources. Have a significant impact on the financing/financing program for biodiversity. (3) Potential to mobilize or save a large amount of resources. About 15% of total demand or current spending (2) Potential to mobilize or save resources relative to current spending or needs. About 5-15% of current total demand or spending (1) Potential to mobilize or save a small amount of resources compared to current expenditures or needs. About under 5% of current total demand or spending (0) Potential to mobilize resources/minimize resources compared to current needs or spending
(3) Political feasibility and likelihood of success	(4) Very high probability of success. Have broad political and social support (or high commercialization). Have no major obstacles to implementation. Have convincing evidence of successful, replicable and sustainable experience in other areas (3) High probability of success. Have political and social support (or commercialization). Obstacles to implementation under control. There has been evidence of successful, replicable and sustainable experience in other areas (2) The probability of success is limited due to limited political and social support (or the possibility of limited commercialization). There are technical or deployment obstacles. Less evidence of successful, replicable and sustainable experience in other areas (1) The probability of success is low due to political and social obstacles and the inability to commercialize, technical obstacles or large deployments (0) Completely incapable of succeeding in current conditions and not being able to commercialize

OUTCOMES OF THE RAPID SCREENING

STT	Criteria	Potential for BD Impact	Scale of Financial opportunity	Political feasibility and likelihood of success	Sum of Rapid Feasibility Scores	Consider in next step? (Y/N)
1	Biodiversity offsets	4	4	3	11	YES
2	Bioprospecting	4	3	3	10	YES
3	REDD+	4	3	3	10	YES
4	Products sold for conservation or wildlife	2	3	3	8	NO
5	Corporate and corporate foundations' donations	3	3	3	9	NO
6	Technology upgrade and maintenance	2	2	3	7	NO
7	Debt-for-Nature Swaps	3	4	2	9	NO
8	Disaster risk insurance	2	2	3	7	NO
9	Green finance	2	2	2	6	NO
10	Community finance	3	3	3	9	NO
11	Green procurement	3	3	3	9	NO
12	Human resources management	4	3	4	11	YES
13	Conservation extension services	3	2	4	9	NO
14	Mobilization of private donations	3	3	3	9	NO
15	Increasing Official Development Assistance (ODA)	4	3	4	11	YES
16	Bilateral ODA	4	3	4	11	YES
17	Climate aid	4	3	4	11	YES
18	Multilateral ODA	4	3	4	11	YES
19	Other official flows	3	3	4	10	YES
20	Promoting natural capital accounting	2	3	2	7	NO
21	Payment for ecosystem services	4	4	4	12	YES

STT	Criteria	Potential for BD Impact	Scale of Financial opportunity	Political feasibility and likelihood of success	Sum of Rapid Feasibility Scores	Consider in next step? (Y/N)
22	Payment for ecosystem services: state intermediation and/or fee	4	4	4	12	YES
23	Compensation for planned environmental damage	3	3	3	9	NO
24	Penalties and other compensation for unplanned environmental damage	4	3	3	10	YES
25	Promotion of sustainable tourism	3	3	4	10	YES
26	Remittances	2	3	3	8	NO
27	Eco-labels	2	2	4	8	NO
28	Taxes, fees, and quotas in the fishery sector	4	4	2	10	YES
29	Refining incentives and other regulations in the fishery sector	4	4	2	10	YES
30	Taxes on natural resources (non-renewable)	4	4	2	10	YES
31	Taxes on fuel	4	4	2	10	YES
32	Taxes on renewable natural capital	4	4	2	10	YES
33	Taxes, fees, and royalties in the forestry sector	4	4	2	10	YES
34	Forestry Concession Fees	4	4	2	10	YES
35	Water tariffs	4	4	2	10	YES
36	Water abstraction charges	4	4	2	10	YES
37	Wastewater fees	4	4	2	10	YES
38	Taxes on pesticides and fertilizers	4	3	2	9	NO
39	Taxes and fees in the tourism sector	3	3	3	9	NO
40	Entrance fees	3	3	2	8	NO
41	Climbing fees	3	3	2	8	NO
42	Diving fees	3	3	2	8	NO
43	Filming and photography fees	3	3	2	8	NO

STT	Criteria	Potential for BD Impact	Scale of Financial opportunity	Political feasibility and likelihood of success	Sum of Rapid Feasibility Scores	Consider in next step? (Y/N)
44	Camping fees	3	3	2	8	NO
45	Tourism, real estate and commercial concessions	2	3	2	7	NO
46	Other PA and tourism fees	2	3	2	7	NO
47	Taxes and fees in the wildlife sector	4	3	2	9	NO
48	Penalties for illegal hunting and collecting	4	3	4	11	YES
49	Technology upgrade and maintenance	2	2	3	7	NO
50	Trust funds	3	2	2	7	NO
51	Protected Area Trust Funds	4	2	2	8	NO
52	Environmental and Social Impact Assessments	4	2	3	9	NO
53	EIA Performance Bonds	4	2	3	9	NO
54	EIA Permitting and Review Fees	3	2	3	8	NO

B. CRITERIA AND OUTCOMES OF THE DETAILED SCREENING

Code	Criteria
1	A positive record of implementation
2	Will it generate, leverage, save, or realign a large volume of financial resources?
3	Will financing sources be mobilized in a compatible timeline with needs?
4	Will financing sources be stable and predictable?
5	Do the persons or entities paying have a willingness and ability to pay or invest?
6	Are the financial risks adequately managed (e.g. exchange rate, lack of investors, etc.)?
7	Are start-up costs onerous in comparison to the expected financial returns?
8	Does the solution improve incentives to manage biodiversity and ecosystems sustainably?
9	Will the financial resources remain targeted to biodiversity over time?
10	Are risks to biodiversity (e.g. disrespect of mitigation hierarchy) low or easily mitigated? How challenging would it be to develop safeguards?
11	Will there be a positive social and economic impact (e.g. jobs, poverty reduction and cultural and gender equality)?
12	Have risks of significant unintended negative social consequences been anticipated and managed?
13	Will it be viewed as equitable and will there be fair access to the financial and biodiversity/ ecosystem resources?
14	Is it backed by political will?
15	Have political risks been anticipated and managed?
16	Is buy-in among stakeholders (i.e. potential investors/decision makers, implementers, and beneficiaries) sufficiently strong to counter potential opposition?
17	Do the managing actor(s) have sufficient capacity? Can they rapidly acquire it?
18	Is it legally feasible? How challenging will any legal requirements be?
19	Is it coherent with the institutional architecture? Can synergies be achieved?

OUTCOMES OF THE RAPID SCREENING

STT	Solution/Criteria	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	(Total over 95 = 19*5)	Percent-age	Recommendation for implementation
1	Biodiversity offsets	2	4	2	4	4	4	5	5	5	5	4	3	4	5	4	4	3	5	4	76	80%	YES
2	Bioprospecting	4	4	3	4	3	4	4	4	5	5	4	3	4	4	4	4	4	5	4	76	80%	YES
3	REDD+	4	4	4	4	3	4	4	4	5	4	4	3	3	5	4	4	4	5	4	76	80%	YES
4	Human resources management	4	5	4	4	4	4	5	5	4	4	4	4	4	5	4	5	4	5	4	82	86%	YES
5	Increasing Official Development Assistance (ODA)	5	5	4	5	5	5	4	5	5	5	4	4	4	4	4	4	5	5	5	87	92%	YES
6	Bilateral ODA	5	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4	5	5	5	88	93%	YES
7	Climate aid	5	5	5	5	5	5	4	5	5	5	4	4	4	4	5	4	5	5	5	89	94%	YES
8	Multilateral ODA	5	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4	5	5	5	88	93%	YES
9	Other official flows	4	5	4	4	4	5	4	5	5	5	4	4	4	4	4	4	5	5	5	84	88%	YES
10	Payment for ecosystem services	5	5	5	5	5	4	5	5	5	5	4	4	5	5	4	4	5	5		85	89%	YES
11	Payment for ecosystem services: state intermediation and/or fee	5	5	5	5	5	4	5	5	5	5	4	4	5	5	4	4	5	5	5	90	95%	YES
12	Penalties and other compensation for unplanned environmental damage	3	4	4	3	3	4	4	4	3	4	3	3	4	5	4	4	4	5	4	72	76%	NO
13	Promotion of sustainable tourism	4	4	4	4	4	4	4	5	3	3	4	3	4	5	4	4	4	5	4	76	80%	YES
14	Taxes, fees, and quotas in the fishery sector	4	5	5	4	4	4	4	4	3	3	3	4	4	3	4	4	4	4	5	75	79%	NO
15	Refining incentives and other regulations in the fishery sector	4	4	4	4	4	4	4	4	3	4	3	4	4	3	4	4	4	4	5	74	78%	NO

STT	Solution/Criteria	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	(Total over 95 = 19*5)	Percent-age	Recommendation for implementation
16	Taxes on natural resources (non-renewable)	4	5	5	4	4	5	5	4	3	4	3	4	4	3	4	4	4	4	5	78	82%	YES
17	Taxes on fuel	4	5	5	4	4	5	5	4	3	4	3	4	4	3	4	4	4	4	5	78	82%	YES
18	Taxes on renewable natural capital	4	5	5	4	4	5	5	4	3	4	3	4	4	3	4	4	4	4	5	78	82%	YES
19	Taxes, fees, and royalties in the forestry sector	4	4	4	4	4	4	5	4	3	4	3	4	4	3	4	4	4	4	5	75	79%	NO
20	Forestry Concession Fees	3	4	4	3	3	4	4	4	3	3	3	4	4	3	3	4	4	4	5	69	73%	NO
21	Water tariffs	4	5	5	4	4	5	5	4	3	4	3	4	4	3	4	4	4	4	5	78	82%	YES
22	Water abstraction charges	5	5	5	4	4	5	5	4	3	4	3	4	4	3	4	4	4	4	5	79	83%	YES
23	Wastewater fees	5	5	5	4	4	5	5	4	3	4	3	4	4	3	4	4	4	4	5	79	83%	YES
24	Penalties for illegal hunting and collecting	4	4	4	3	4	5	5	5	3	4	3	4	4	5	4	4	4	5	5	79	83%	YES