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**Food and Agriculture Organization  
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SUMMARY REPORT  
**NATIONAL DIALOGUE  
VIET NAM**

**KUNMING MONTRÉAL-GLOBAL BIODIVERSITY FRAMEWORK TARGET 2  
PILOTS PROJECT**

26-28 JUNE 2024 | HANOI - VIET NAM



Kunming - Montréal  
**GLOBAL BIODIVERSITY FRAMEWORK**





# EXECUTIVE SUMMARY

The national dialogue on the Technical Resource Manual and Ecosystem Restoration Target 2 for the Kunming-Montreal Global Biodiversity Framework (KM-GBF) was jointly organized by Centre for International Forestry Research and World Agroforestry (CIFOR-ICRAF) and the Food and Agriculture Organization of the United Nations (FAO) from June 26 to 28, 2024. This national dialogue is part of the KM-GBF Target 2 Project, which focuses on five pilot countries: Peru, Burkina Faso, Kenya, Viet Nam, and Brazil.

The main objective of the national dialogue was to collaboratively identify challenges and build a roadmap for Viet Nam to achieve KM-GBF Target 2: ensuring that at least 30 percent of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration by 2030.

### Objectives of the national dialogue:

- Introduce and gather targeted feedback to finalize the Target 2 Resource Guide.
- Create a connected space or network for knowledge exchange among stakeholders to discuss tools, platforms, and processes that enhance accurate monitoring and reporting of restoration actions, including the engagement of non-state actors.
- Identify key challenges, capacity gaps, and solutions for setting restoration targets (planning) and monitoring ecosystem restoration, with a focus on all ecosystems.
- Introduce the Framework for Ecosystem Restoration Monitoring (FERM), the official reporting platform for the UN Decade and GBF Target 2, and assess its alignment with national platforms.
- Discuss and explore Target 2 qualifiers, including definitions of degradation, ecosystem typology, restoration planning and prioritization, funding gaps, and implementation challenges.
- Lay the groundwork for FAO to explore data interoperability.
- Collect feedback on the compiled default dataset for restoration (from both official sources and non-state actors) and discuss the validation process for non-official data in reporting.
- Develop short case studies for the resource guide and propose plans for further capacity-building initiatives to operationalize the monitoring guidance in pilot countries.
- Prepare for the development of an interoperability framework at the national scale, utilizing data and inputs from partners.

The event brought together 47 in-person participants representing diverse stakeholders, including the Ministry of Natural Resources and Environment (MONRE), the Ministry of Agriculture and Rural Development (MARD), Management Boards of Protected Areas, and international and local non-governmental organizations (NGOs).

The national dialogue highlighted significant challenges in Viet Nam's ecosystem restoration efforts, such as financial constraints, inadequate policy mechanisms, lack of clear guidance, land-use conflicts, poor coordination among stakeholders, and fragmented data systems.

Participants explored various tools, initiatives, and best practices that could be leveraged to achieve effective ecosystem restoration. The Framework for Ecosystem Restoration Monitoring (FERM) was presented as a key tool for tracking progress and ensuring data transparency.

Two group discussions were conducted to gather input from all participants:

1. **Operationalizing Target 2:** Restoration data flows, arrangements, and mapping challenges.
2. **Capacity Development and Roadmaps for Viet Nam.**

Session summaries are available in the Account of Proceedings, while the results of the breakout group discussions are detailed in Annex II: Summaries of Breakout Group Discussions.

The meeting successfully established a foundation for future collaborative efforts to achieve KM-GBF Target 2 in Viet Nam. Participants emphasized the need for continued support, particularly in national reporting and capacity-building initiatives, to ensure the successful implementation of ecosystem restoration goals. Next steps include refining the roadmap and further developing tools and resources to support national efforts in restoring degraded ecosystems by 2030.

# ABBREVIATIONS

<b>BOD</b>	Biological Oxygen Demand	<b>NBCA</b>	Nature and Biodiversity Conservation Agency
<b>CIFOR-ICRAF</b>	Centre for International Forestry Research and World Agroforestry	<b>NDC</b>	Nationally Determined Contribution
<b>CEBID</b>	Centre for Environment and Biodiversity Information and Data	<b>OECS</b>	Other Effective Area-Based Conservation Measures
<b>COP</b>	Conference of the Parties	<b>REDD+</b>	Reducing Emissions from Deforestation and Forest Degradation
<b>COD</b>	Chemical Oxygen Demand	<b>SBSTTA</b>	Subsidiary Body on Scientific, Technical and Technological Advice
<b>CTNP</b>	Cat Tien National Park	<b>SNV</b>	Netherlands Development Organisation
<b>CRES</b>	Centre for Resources, Environment, and Sustainability	<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>EF</b>	Ecosystem Functional Groups	<b>UNDP</b>	United Nations Development Programme
<b>ESG</b>	Environmental, Social, and Governance	<b>VAFS</b>	Viet Nam Academy of Forest Sciences
<b>CSO</b>	Civil Society Organizations	<b>VNA</b>	Viet Nam News Agency
<b>FAO</b>	Food and Agriculture Organization of the United Nations	<b>VTV</b>	Viet Nam Television
<b>FERM</b>	Framework for Ecosystem Restoration Monitoring	<b>VoV</b>	Voice of Viet Nam
<b>FAO</b>	Food and Agriculture Organization of the United Nations	<b>WWF</b>	World Wide Fund for Nature
<b>FERM</b>	Framework for Ecosystem Restoration Monitoring		
<b>FPIC</b>	Free, Prior, and Informed Consent		
<b>FORMIS</b>	Forest Resource Monitoring System		
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation)		
<b>IUCN</b>	International Union for Conservation of Nature		
<b>KM-GBF</b>	Kunming-Montreal Global Biodiversity Framework		
<b>LEAF</b>	Lowering Emissions by Accelerating Forest Finance		
<b>MARD</b>	Ministry of Agriculture and Rural Development		
<b>MCD</b>	Centre for Marine Life Conservation and Community Development		
<b>MONRE</b>	Ministry of Natural Resources and Environment		
<b>NBSAP</b>	National Biodiversity Strategy and Action Plan		

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# INTRODUCTION

Addressing the ongoing biodiversity crisis requires collective global and national efforts to reverse nature loss. The Kunming-Montreal Global Biodiversity Framework (KM-GBF) offers a strategic and operational framework to halt and reverse biodiversity loss, with a global restoration target (Target 2) to restore at least 30 percent of degraded terrestrial, inland water, and marine and coastal ecosystems by 2030. This target includes qualifiers for effective restoration that enhance biodiversity, ecosystem integrity and connectivity, as well as ecosystem functions and services.

To streamline reporting processes and reduce duplication of efforts, Food and Agriculture Organization of the United Nations (FAO), with support from the Task Force on Monitoring under the UN Decade on Ecosystem Restoration, has taken leadership as the custodian agency, providing technical support and developing methodologies for Convention on Biological Diversity (CBD) Target 2. Following the adoption of the KM-GBF, the Target 2 working group, led by FAO and partners, mobilized in early 2023 to support the implementation, planning, and monitoring of ecosystem restoration under Target 2 in collaboration with the CBD Secretariat.

In this context, the informal Target 2 Partnership has been developing a technical resource guide and manual. These resources provide definitions of key terms, guidance on national target-setting, and methodologies for monitoring Target 2 under the KM-GBF. As a partner of the Target 2 Partnership and an

active member of the Task Force on Monitoring, the Centre for International Forestry Research and World Agroforestry (CIFOR-ICRAF) has been providing technical support to custodian agencies and parties, aiding the development of restoration indicators, national frameworks, monitoring platforms, and dashboards.

Building on this work, CIFOR-ICRAF extended its support as a scientific partner to four pilot countries—Peru, Burkina Faso, Kenya, and Viet Nam—that have initiated early actions toward Target 2, with FAO convening the work in Brazil as the fifth pilot country. These pilots are being used to test the Target 2 Resource Guide, gather feedback for its finalization, and map institutional arrangements and data flows for restoration across diverse terrestrial and non-terrestrial ecosystems. Capacity gaps and existing restoration platforms are also being explored.

In Viet Nam, CIFOR-ICRAF collaborated with FAO to organize a national workshop from June 26 to 28, 2024. The workshop aimed to ensure alignment on operationalizing Target 2 and provided training on the Framework for Ecosystem Restoration Monitoring (FERM) platform, the official monitoring platform for the United Nations (UN) Decade and Target 2. The feedback and results from this workshop will contribute directly to the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) 26 event and COP 16.

This report provides an overview of the workshop sessions and discussions. The workshop agenda and organization are detailed in Annex I, while summaries of group discussions are presented in Annex II. Annex III includes a list of over 40 in-person participants representing stakeholders such as the Ministry of Natural Resources and Environment (MONRE), the Ministry of Agriculture and Rural Development (MARD), management boards of protected areas, and international and local NGOs.

**Background documents and all presentations are available online (see in resources).**

## NATIONAL DIALOGUE OBJECTIVES:

1	Introduce and gather targeted feedback for the finalization of the Target 2 Resource Guide.
2	Create a connected network for knowledge exchange among stakeholders to discuss tools, platforms, and processes that enhance accurate monitoring and reporting of restoration actions, including the engagement of non-state actors.
3	Identify key challenges, capacity gaps, and solutions for setting restoration targets (planning) and monitoring ecosystem restoration across all ecosystems.
4	Introduce the FERM, the official reporting platform for the UN Decade and Target 2 of the GBF, and assess its alignment with national platforms.
5	Discuss and explore Target 2 qualifiers, including definitions of degradation, ecosystem typologies, restoration planning and prioritization, funding gaps, and implementation challenges.
6	Lay the groundwork for FAO to advance data interoperability.
7	Collect feedback on the compiled default dataset on restoration (from both official sources and non-state actors) and discuss validation processes for non-official data in reporting.
8	Develop short case studies for the resource guide and propose plans for capacity-building initiatives to operationalize monitoring guidance in pilot countries.
9	Prepare for the development of an interoperability framework at the national scale, utilizing data and inputs from partners



# ACCOUNT OF THE PROCEEDINGS



## OPENING OF THE MEETING

The national dialogue commenced with opening remarks from Dr Nguyen Quang Tan, National Coordinator of CIFOR-ICRAF Viet Nam, and Ms Yelena Finegold, FAO Forestry Officer. The KM-GBF Target 2 project was presented by Khalil Wajj, CIFOR-ICRAF.

## SESSION 1: THE UN DECADE ON ECOSYSTEM RESTORATION AND KM-GBF TARGET 2 PROJECT

**Ms Yelena Finegold (FAO)** introduced the UN Decade on Ecosystem Restoration and highlighted the crucial role of Task Forces in supporting its mission. She emphasized the global status of ecosystem restoration and discussed the work of the Task Force on Monitoring, which is developing systems to track restoration efforts, provide guidance, identify gaps, and foster collaboration in restoration monitoring. Ms Finegold introduced the Framework for Ecosystem Restoration Monitoring (FERM), which facilitates the sharing of good practices and is developing a dashboard to compile existing information on restoration. FERM will serve as the official platform for reporting on Target 2 through the Convention on Biological Diversity (CBD).

For Target 2, countries are expected to monitor and report on the “area under restoration” in both 2026 and 2029. The workshop aimed to develop a roadmap for Viet Nam, one of five pilot countries—alongside Brazil, Burkina Faso, Kenya, and Peru—to report on its restoration progress. This initiative is part of broader efforts to measure progress and support countries in achieving the ambitious biodiversity restoration goals set under the KM-GBF.

**Mr Khalil Walji (CIFOR-ICRAF)** provided an overview of the KM-GBF, emphasizing the importance of national-level implementation through collaborative efforts involving multiple stakeholders. He introduced the Target 2 Pilots Project, which supports parties in addressing data gaps, setting targets for National Biodiversity Strategies, and preparing action plans (NBSAPs) for submission at COP 16. Key outputs of the project include:

- Developing national level workplans.
- Reviewing the Target 2 Resource Guide.
- Assessing current restoration data and platforms.
- Evaluating Target 2 status and proposing operationalized monitoring guidance.

## Discussion and Q&A

- Participants commented on the utility of FERM and emphasized its potential to connect restoration data from national systems, such as national forest monitoring systems.
- Several participants highlighted the need to include aquatic and aquaculture ecosystems in national systems discussions, as forests often receive more attention. They stressed the importance of ensuring that aquatic systems are equally prioritized in restoration implementation and monitoring efforts.



## SESSION 2: ECOSYSTEMS RESTORATION IN VIET NAM: STATUS AND CHALLENGES

### Policy and Action for Ecosystem Restoration in Viet Nam – Dr Nguyen Xuan Dung, Head of Ecosystem and Landscape, Nature and Biodiversity Conservation Agency (NBCA), MONRE

**Dr Nguyen Xuan Dung** outlined Viet Nam's ecosystem restoration policies and actions, including:

- **Decision 1975/QĐ-TTg (2021):** National Action Plan for the Conservation and Sustainable Use of Wetlands (2021–2030). Goals include managing 70% of important wetlands effectively by 2025 to prevent land-use changes and restoring at least 25% of degraded wetlands by 2030.
- **Decision 149/QĐ-TTg (2022):** Approval of the National Biodiversity Strategy to 2030 with a Vision to 2050. Specific 2030 targets include: 9% of terrestrial land as protected areas, 3–5% of marine and coastal areas protected, 70% of protected areas effectively managed, forest cover maintained at 42–43%, and 20% of degraded natural ecosystems restored.

- **Decision 450/QĐ-TTg (2022):** Approval of the National Environmental Protection Strategy to 2030 with a Vision to 2050. This strategy integrates ecosystem protection and restoration into development policies, focusing on sustainable management and restoration of degraded ecosystems such as mangroves, wetlands, and seagrass beds.

To achieve the goals set for 2030 and 2050, Viet Nam must first assess the current state of ecosystem degradation. This requires evaluating the extent of degradation to determine the appropriate next steps and interventions. By understanding the costs associated with degradation, effective strategies and best practices for restoration can be identified. A clear and comparable definition of degradation, along with a robust monitoring framework, is essential.

MONRE will initially prioritize wetland ecosystem restoration across the country, focusing on Ramsar sites, nature reserves, and key ecosystems such as mangrove forests, coral reefs, seagrass beds, melaleuca forests, and other important wetland areas.

## Forest Ecosystems Restoration in Viet Nam: Status and Challenges

**Associate Professor Do Anh Tuan** from the Viet Nam University of Forestry provided an update on Viet Nam's forest ecosystems, which span 4.8 million hectares. Among the most biodiverse in the world, these forests include evergreen tropical rainforests, bamboo forests, savannahs, swamp forests, and mangroves. They are vital for sustaining the livelihoods of approximately 25 million people, primarily from poorer communities. However, over 75% of natural forests are now degraded due to factors such as illegal logging, agricultural conversion, insect infestations, fires, and legal logging. Despite the evolution of forest management policies since 1995 to balance economic development with biodiversity conservation, significant gaps remain.

Viet Nam's forest restoration efforts face several key challenges:

- Misunderstandings and poor practices have resulted in a narrow focus on tree planting, prioritising reclamation over true restoration.
- A lack of ecological knowledge hampers effective practices.
- Efforts are predominantly single-disciplinary, lacking coordination among stakeholders and failing to provide economic incentives for local communities.
- Many initiatives are short-term and inadequately involve local communities due to a top-down approach and restricted use rights.

From a policy perspective, while forest restoration is mentioned in legal regulations, there are no specific or detailed guidelines, no national technical frameworks, and no comprehensive restoration programmes. Additionally, overlapping mandates between MARD and MONRE, coupled with inadequate planning, funding, and monitoring, further hinder restoration efforts.

Effective forest restoration should adopt a broader landscape restoration approach, involving coordinated efforts across sectors. Recommendations include streamlining government processes, adopting a bottom-up approach, and focusing on long-term, comprehensive restoration strategies rather than immediate fixes.

## Panel Discussion: Challenges and Collaboration for Implementing Target 2 in Viet Nam

Facilitated by **Dr Nguyen Quang Tan**, this discussion brought together six panellists to address challenges and explore collaboration opportunities for achieving Target 2 in Viet Nam.

**Associate Professor Nguyen Dinh Tho**, Director of the Institute for Natural Resources and Environment Strategy and Policy (IPSONRE), highlighted how IPSONRE and NBCA are leading initiatives toward the 30x30 goal by expanding protected areas known as OECMs (Other Effective Area-Based Conservation Measures). Key focus areas for advancing ecosystem restoration and the Global Biodiversity Framework (GBF) include finance and cost management, technological advancements, capacity building, and the development of economic tools and market access strategies. The policy framework incorporates resolutions on the circular economy, with biodiversity and natural capital accounting forming the basis for a national biodiversity database prioritizing both quantity and quality. This initiative aligns with carbon and plastic credit markets.

**Dr Nguyen Xuan Dung**, Head of Landscape Ecology, NBCA, presented draft guidelines for coordinating stakeholders in implementing NBSAP policies, particularly at the local level. The agency has submitted the 2021–2030 Biodiversity Planning for approval, which includes six conservation management targets. Plans are underway to propose amendments to the Biodiversity Law, emphasizing ecosystem restoration (especially wetlands) and the development of natural ecosystem services in alignment with the Environmental Protection Law. Despite progress, technical and financial constraints remain significant challenges. NBCA has advised the Prime Minister to approve a biodiversity monitoring plan with 36 indicators and is developing a circular on biodiversity inventory to address monitoring, reporting, and restoration needs.

**Dr Hoang Van Thang**, Director of the Forest Research Institute (SRI), discussed the integration of restoration monitoring into the national forestry development strategy. With 75% of forest ecosystems degraded, restoration efforts guided by the Forestry Law are critical. Two major projects focus on enhancing the multifunctional value of forests and improving overall forest quality. Restoration strategies are tailored to specific forest types, such as production forests and biodiversity conservation forests. For severely degraded forests with poor species composition, supplementary planting is essential to accelerate



ecological succession, ensuring restoration aligns with the intended purpose of each forested area.

**Mr Pham Van Dan**, Deputy Director of Nui Ba Biduop National Park, discussed the challenges of implementing Target 2 in Viet Nam. He explained how national and local policies are guiding and supporting ecosystem restoration efforts in various regions, though new policies may be required to address emerging challenges. National parks are effective in forest protection and restoration; however, they face significant threats, including land encroachment, fragmentation, and the conversion of forestland for other uses. Forest restoration is crucial for maintaining the stability of forested areas. While reforestation efforts under Goal 2 address canopy cover, there is a need for clearer models of ecosystem restoration. Effective forest protection and management also contribute to ecosystem restoration by preventing the gradual degradation of forest ecosystems, avoiding complete loss. Expanding the scope of forest protection and increasing the number of nature reserves through research and policy enhancements are essential to further support these efforts.

**Ms Tran Thi Hong Hanh**, Head of Science Management and International Cooperation at Xuan Thuy National Park, discussed how the park monitors and measures the success of ecosystem restoration efforts, particularly for mangrove forests and wetlands. This is achieved through a combination of stakeholder engagement, policy adaptation, and ecological assessments. The park manages approximately 1,000 hectares within its 7,500-hectare area, focusing on harmonizing conservation goals with the sustainable use of resources by local communities. This approach prioritizes the conservation of important bird areas while permitting regulated harvesting, differing from the stricter protection models used in Special-Use Forests. The park has expanded restoration efforts with support from stakeholders, including the NBCA and NGOs. However, challenges persist due to land-use pressures from aquaculture and local livelihoods, complicating restoration activities. Additionally, the potential for sand mining near the park's boundaries poses a significant ecological threat, highlighting the urgent need for effective monitoring and policy coordination to ensure the long-term success of ecosystem restoration initiatives.

**Mr Nguyen Cong Minh** from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) emphasized the critical role of international organizations in supporting Viet Nam's efforts to achieve Target 2 under the Nature

Conservation Project. Development partners act as bridges, facilitating technology transfer, promoting innovation, and mobilizing financial and technical resources for Viet Nam and its private sector in ecosystem restoration.

This support should extend from policy formulation to on-the-ground projects tailored to specific identified needs. Additionally, there is a strong emphasis on enhancing societal participation, with a focus on gender equality and governance in restoration activities.

**Mr Trinh Le Nguyen**, Director of PanNature, discussed mobilizing resources for forest and ecosystem restoration from the private sector. He highlighted the importance of involving local governments and communities, noting the urgency of increasing domestic resource mobilization as international funding declines—currently down by 83%. PanNature has successfully engaged 10,000 individuals and businesses committed to Environmental, Social, and Governance (ESG) principles. Mr. Nguyen also emphasized the potential of carbon credits, particularly in voluntary markets where investors generate credits and donate them to national NDCs without engaging in trading. Additionally, Viet Nam's domestic carbon market, which includes nearly 2,000 emitting entities, presents a significant opportunity for ecosystem restoration through the creation and utilization of carbon credits.





## SESSION 3: MAPPING RESTORATION PRIORITIES, STAKEHOLDERS, DATA FLOWS, AND INSTITUTIONAL ARRANGEMENTS

Participants were divided into four groups based on different ecosystems (forest, wetland, marine, and buffer zone ecosystem restoration) to discuss restoration targets, stakeholder involvement in achieving these goals by 2030, challenges, and potential solutions (details in Annex II)

### Challenges

The discussions highlighted several challenges facing ecosystem restoration in Viet Nam. Key issues include insufficient and delayed financial resources, inadequate policy mechanisms, land-use conflicts, and a lack of comprehensive restoration indicators and specific guidelines. Poor coordination among stakeholders, declining international funding, and the absence of structured data management systems further exacerbate these challenges.

### Stakeholders

Key stakeholders involved in ecosystem restoration include government agencies such as MARD, MONRE, and local authorities; forest and protected area management boards; local communities; sociopolitical organizations; and NGOs. The private sector plays a limited role in Viet Nam's restoration efforts, primarily due to a lack of incentive mechanisms. However, its potential—especially in funding forest restoration—is increasingly recognized. Research institutions also play a crucial role by providing scientific support for restoration initiatives. For marine ecosystem restoration, state management agencies, NGOs, and local communities are key players, with the military identified as a potential stakeholder. Collaboration among these diverse groups is essential for successful restoration implementation.

### Solutions

Proposed solutions to the challenges include developing policy mechanisms that encourage private sector participation, socializing financial resources, and adjusting administrative procedures to ensure timely funding. Addressing land-use conflicts through redefining boundaries, resettling affected communities, and investing in alternative livelihoods is also crucial. To achieve better restoration outcomes, it is essential to develop a comprehensive set of indicators, establish pilot models, and enhance monitoring and evaluation practices. Strengthening coordination among stakeholders, supporting livelihood development to reduce ecosystem pressure, and implementing environmental service payments are vital steps. Additionally, raising awareness, building capacity, and improving data management systems will significantly enhance the overall effectiveness of ecosystem restoration efforts.



## SESSION 4: DATA ON ECOSYSTEM RESTORATION IN VIET NAM

### Monitoring and Data of Forest Status in Viet Nam – Mr Nguyen Danh Thanh Hai, Department of Information and Digital Transformation, Department of Forest Protection, MARD

**Mr Nguyen Danh Thanh Hai** presented an overview of forest monitoring data in Viet Nam. As of December 31, 2023, Viet Nam had 14.86 million hectares of forestry land, with 53% classified as production forests, 32% as protective forests, and 15% as special-use forests. These forests are predominantly managed by communal People's Committees, forest management boards, and individual households. Natural forests continue to face damage and degradation, with an average of 2,648 hectares damaged annually from 2011–2015 and 2,332 hectares per year from 2016–2020, reflecting a slight overall decrease. The primary causes of forest degradation include illegal logging and forest fires, often exacerbated by severe heat, dry conditions, and prolonged droughts in the Northwest and Central regions.

According to the Forestry Law and related decrees and circulars, local governments are responsible for organizing forest status monitoring. The Forest Protection Department manages the nationwide monitoring system, FORMIS, which includes a database of forest users and current forest status. However, challenges such as inaccessible areas, a lack of forest protection personnel, limited access to technology, and discrepancies between records and reality hinder effective monitoring.

Currently, access to FORMIS data is limited. There are two types of accounts: authorized accounts and staff accounts (provincial or lower level), primarily used for reporting. Casual users can access certain data, including forest status and regeneration area information, but with restrictions.

### Information System on Ecosystem and Biodiversity Restoration Data in Viet Nam – Ms Mac Thi Minh Tra, Centre for Environmental Investigation, Information, and Data on Environment and Biodiversity, Department of Nature Conservation and Biodiversity, MONRE

**Ms Mac Thi Minh Tra** from the Centre for Environmental Investigation, Information, and Data on Environment and Biodiversity, MONRE, discussed the information system for ecosystem and biodiversity restoration data in Viet Nam. The Ministry of Natural Resources and Environment (MONRE) oversees biodiversity management in Viet Nam, including the development and sustainable use of natural ecosystems, particularly wetlands. Provincial and municipal People's Committees collaborate with MONRE to manage Ramsar sites and implement Ramsar Convention activities. Under Decree 66/2019/NĐ-CP, the Nature and Biodiversity Conservation Agency (NBCA) within MONRE is responsible for managing and ensuring the sustainable use of natural ecosystems. Various MONRE departments, including the NBCA, the Department of Seas and Islands, and the National Remote Sensing Department, manage biodiversity data. This data encompasses legal documents, national biodiversity conservation plans, information on natural ecosystems, species, genetic resources, inspection reports, and international cooperation records. The data is stored in multiple formats, including paper documents, electronic files, specialized databases, and websites. However, challenges persist, such as incomplete and inconsistent data, limited sharing and standardization of databases, and insufficient local resources for biodiversity management. Efforts are ongoing to develop a national biodiversity database by 2030, improve information systems, and establish mechanisms for data sharing and collaboration among stakeholders to ensure continuous and comprehensive biodiversity monitoring and management.





Opening of  
the meeting



Session 1



Session 2



Session 3



Session 4



Session 6



Session 7



Session 8



Session 9



Closing  
Remarks

## SESSION 5: EXPLORING THE TARGET 2 MANUAL

**Mr Khalil Walji** from CIFOR-ICRAF provided an overview of the draft Target 2 Resource Manual, developed to help countries and partners translate restoration commitments into actionable plans and operationalize restoration at the scales envisioned in Target 2. The manual consists of three main parts:

- 1. Introduction:** Lessons learned from Aichi, the UN Decade on Ecosystem Restoration, and other global restoration initiatives.
- 2. Integrating Target 2:** Guidance for incorporating Target 2 into National Biodiversity Targets and NBSAPs.
- 3. Operationalizing Ecosystem Restoration:** Practical steps and methodologies for implementing restoration.

Feedback on the manual highlighted the need for case studies, including potential examples from Viet Nam, to provide practical applications. These case studies should be concise, based on completed projects, and relevant to sections of the manual to facilitate learning and modelling for other countries. Additionally, FAO is developing an open-access online course to complement the manual and support Target 2 implementation.

Participants commented that while the guide is high-level and theoretical—well-suited for academia—it requires further adaptation to meet the needs of practitioners. They welcomed the resource but emphasized the importance of developing additional guidance applicable at the provincial level in Viet Nam. Input from technical experts was recommended to integrate these guidelines into local contexts.

Questions were raised about whether restoration approaches should be landscape-based or ecosystem-specific. Participants also requested further guidance on applying the eight principles for ecosystem restoration in Viet Nam as outlined in the UN Decade's Standard Operating Procedures (SoPs).



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## SESSION 6: ECOSYSTEM TYPOLOGY

**Ms Yelena Finegold** from FAO presented the latest typology developed by the International Union for Conservation of Nature (IUCN), the Global Ecosystem Typology (GET). This typology, published in 2021, is designed to guide countries in aligning their national frameworks with levels 2 and 3 of the GET. It emphasizes classification at the ecosystem functional level and is recommended (though not yet formally adopted) for all targets under the KM-GBF.

The GET aligns with FERM parameters and provides a framework for classifying restoration areas, intervention types, and the status of restoration projects. It organizes ecosystems into three hierarchical levels:

1. **Major Realms:** Terrestrial, marine, and freshwater.
2. **Biomes:** Broad ecological zones within realms.
3. **Ecosystem Functional Groups (EFGs):** Specific ecosystem types based on functional characteristics.

The typology describes 110 ecosystem types across these realms. While the system is still under development, feedback is being sought to improve its alignment with existing monitoring and reporting practices.

**Dr Do Dinh Tu** from the Institute of Ecology and Biological Resources discussed Viet Nam's transition to a more modern ecosystem classification system. Viet Nam's current system is outdated, originating from a 1970 framework with some reference to the United Nations Educational, Scientific and Cultural Organization (UNESCO) coral guidelines. Official classifications began after joining the Ramsar Convention, leading to the adoption of Ramsar classifications. Viet Nam is now transitioning to the IUCN system, which is more evidence-based and scientifically rigorous. This system is expected to improve management practices and align Viet Nam with international standards. It follows key principles, such as representativeness of ecological processes, global biosphere representation, and adaptability to national contexts. The IUCN framework classifies ecosystems into six realms, further subdivided into biomes, functional groups, biogeographic ecotypes, global ecosystem types, and local ecosystem types. Viet Nam is adapting the IUCN system to be more accessible at local levels and has requested technical support from experts. Globally, there are 108 EFGs, and Viet Nam has already classified over 60 EFGs in Quang Ninh, demonstrating significant progress in implementing this framework.





## SESSION 7: CASE STUDIES

### Wetland Ecosystem Restoration at Cat Tien National Park (CTNP) – Mr Pham Ngoc Duong, CTNP

**Mr Pham Ngoc Duong** presented a case study on the successful restoration of wetland ecosystems through crocodile conservation at CTNP. Spanning 71,187.9 hectares, with a total protected area of 81,200 hectares, CTNP is located across Dong Nai, Lam Dong, and Dinh Phuoc provinces. It is recognized as a World Biosphere Reserve and Ramsar Site, supporting diverse ecosystems with 1,655 plant and 1,730 animal species.

A major achievement has been the recovery of the freshwater crocodile, which was thought to be extinct in the wild by 1995. Following a recovery programme initiated in 1998 and collaborations with the Saigon Zoo and Australian universities, the crocodile population grew from 60 in 2004 to 519 in 2023. Despite challenges such as reduced water surfaces caused by climate change, pollution, waste leakage, and invasive species like *Mimosa pigra* and *Eichhornia crassipes* (water hyacinth), ongoing monitoring and habitat management have supported the growth of the crocodile population.

The project highlights the critical role of ex-situ conservation facilities in preserving genetic diversity and providing resources for wild species recovery. Effective reintroduction plans and consistent monitoring have proven essential for successful wildlife restoration programmes.

### Forest Ecosystem Restoration by PanNature – Trinh Le Nguyen, Director of PanNature

**Mr Trinh Le Nguyen** discussed PanNature's efforts to engage communities and private entities in forest ecosystem restoration. Established in 2006, PanNature is a non-profit organization focused on environmental protection, biodiversity conservation, climate change adaptation, and ecosystem restoration.

The organization's "Rừng Xanh Lên" (Green Forest Rising) programme is a comprehensive initiative to restore 50 hectares of natural forests in the Mai Chau-Van Ho landscape, home to endangered species and ethnic minority communities. The programme raises funds from donors, develops reforestation plans, and manages technical aspects, while involving local authorities, forest rangers, and communities in implementation and monitoring. It employs multi-purpose tree species to enhance wildlife habitats and provide local livelihoods, ensuring sustainability through community monitoring for 3–5 years.

PanNature also conducts communication campaigns to disseminate information, advocate for forest restoration, and build partnerships with enterprises like MoMo and Military Bank to promote tree planting. However, a major challenge is mobilizing funds for long-term monitoring, as most donors only fund the initial planting phase.

The programme leverages technology and digital tools like RESTOR to monitor impacts and has initiated efforts to engage the private sector in carbon credit schemes to scale up restoration activities. Securing land for restoration from areas currently used for cultivation remains a challenge, requiring careful stakeholder engagement and persuasive discussions to balance competing interests.





Opening of  
the meeting



Session 1



Session 2



Session 3



Session 4



Session 5



Session 6



Session 7



Session 9



Closing  
Remarks

## SESSION 8: FOREST RESTORATION PLANNING

**Ms Yelena Finegold** from FAO introduced the web-based tool SEPAL ([sepal.io](https://sepal.io)), designed for mapping forests and forest changes in South America, Africa, and Asia. SEPAL helps identify areas for restoration by comparing potential and actual tree cover, excluding urban areas, and pinpointing deforested regions. The tool enables users to identify tree growth areas, rank benefits such as biodiversity, carbon impact, and livelihoods, and estimate tree planting costs. Customization is possible based on various constraints, with a default resolution of 100m pixels and coarsest resolution at 10km. While SEPAL is not a decision-making tool, it provides crucial data to inform decision-making processes.

Ms. Finegold also presented a case study of SEPAL's application in Nepal, where the tool was used to map areas for restoration by identifying regions where tree cover was below its potential.

**Mr Pham Ngoc Hai**, from the Forest Inventory and Planning Institute (FIPI), discussed FIPI's use of the Se.Plan tool to identify potential forest restoration areas in Viet Nam. He highlighted the country's engagement with REDD+ initiatives, such as the Forest Carbon Partnership Facility (FCPF) in the North Central region and LEAF in the South Central and Central Highlands regions.

Viet Nam has implemented a national strategy to enhance forest quality, making forest restoration planning essential for assessing current forest cover, identifying potential restoration areas, and evaluating the impact of restoration projects. Key restoration measures include restoring existing natural forests and establishing new ones, both critical for increasing carbon stocks and reducing greenhouse gas emissions.

Accurate and systematic information is essential for effective restoration planning, and cost-benefit analysis plays a pivotal role. FAO's SE.plan tool, integrated into the SEPAL cloud-based platform (free and open-source), supports this process by mapping restoration potential using spatial data. From 2021 to 2022, FIPI collaborated with FAO and SilvaCarbon to pilot SE.plan in Viet Nam, focusing on national and ecological scales. From 2023 to 2024, the pilot extended to the provincial level, covering 11 provinces and prioritizing reforestation and carbon emission reductions.

### Key findings from the pilot revealed:

- The main causes of deforestation include the conversion of forest land to agriculture and encroachment.
- Potential restoration areas are often small and fragmented.
- Local communities favour agroforestry for sustainable livelihoods.
- Reforestation costs are higher than agricultural costs, making cost parameters crucial for national forest restoration planning.

The pilot also demonstrated positive interest in carbon credits and provided valuable insights into prioritizing socioeconomics and biodiversity in forest restoration scenarios.



## SESSION 9: THE FRAMEWORK FOR ECOSYSTEM RESTORATION MONITORING (FERM)

**Ms. Yelena Finegold** from FAO introduced the Framework for Ecosystem Restoration Monitoring (FERM), a tool used in a case study by FAO to support monitoring of Target 2. FERM includes a restoration database and website with a standardized form consisting of seven tabs to capture project details such as duration, contact information, and project location. Users can identify the “area under restoration” and specify the unit of measurement (e.g., hectares for forests, kilometres for aquatic areas). The tool allows for defining restoration activities and selecting indicators to measure progress. FERM incorporates a standard set of ecosystem typologies that can be manually edited and provides access to geospatial data, such as

land productivity, to monitor trends. Users can select and input indicators over time to track changes and progress, enabling comparisons between restoration commitments and actual progress while facilitating information sharing.

FERM also includes a database of good practices, where restoration activities are evaluated for alignment with the principles of the UN Decade on Biodiversity. High-scoring practices are highlighted and added to the database, serving as a resource for improving and tracking restoration efforts. Participants were guided through a practical application of FERM, including creating an account and receiving training on how to upload restoration data.



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Opening of  
the meeting



Session 1



Session 2



Session 3



Session 4



Session 5



Session 6



Session 7



Session 8



Session 9



## SESSION 10: RESTORATION CAPACITY GAPS AND NEEDS

**Mr Khalil Walji** from CIFOR-ICRAF presented a global assessment of restoration capacity, focusing on the current status, gaps, and future steps in ecosystem restoration efforts. Data for the assessment was collected over 4–5 months and presented at the UN Ecosystem Restoration Decade launch event, with a summary report produced in 2021. The report and methodology were used as a baseline for discussions on Viet Nam's restoration needs.

Participants were divided into three groups—local level, national level, and researchers/NGOs—to assess Viet Nam's capacity needs within the context of the global findings. Each group identified the top five critical gaps, brainstormed solutions, and determined whether new activities, guidelines, or resources were required. Key questions included: who is responsible, what opportunities exist, and what is the timeline for addressing these issues—short-term (6 months), mid-term (1–2 years), or long-term (3–5 years). The aim was to develop a transformational strategy to address these gaps with ambition and clarity.

Results from the discussion on Viet Nam's ecosystem restoration efforts highlight challenges at both local and national levels, impacting the overall effectiveness of these initiatives.

At the **local level**, the primary financial gap arises from insufficient funds and complicated financial procedures. Addressing this requires diversified funding sources and simplified procedures, necessitating long-term efforts from the government and social organizations. Additionally, a lack of synchronization in policy application, particularly among senior policymakers, and poor coordination between local governments and forest owners lead to unclear guidance on restoration efforts. These issues hamper the effectiveness of restoration implementation and can be mitigated through policy reviews to improve coordination and regular enforcement of regulations by relevant ministries and local governments.

Capacity limitations, especially in ecosystem degradation assessment and mapping, further hinder Viet Nam's restoration efforts. There was broad agreement on the lack of a clear degradation baseline. Strengthening these capacities through training, equipment procurement, and work plans is essential. Similarly, developing supply chains and integrating restoration activities into markets face challenges such as product selection and market assessment. Addressing these issues requires capacity building, piloting models, and trademark registration, led by government authorities and beneficiary communities over a five-year timeline.



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At the **national level**, gaps include a lack of awareness of restoration priorities, inadequate policy frameworks, and challenges in coordinating planning and implementation efforts. These hinder strategic planning and the execution of restoration initiatives. To bridge these gaps, promoting national interest and political commitment, alongside the development of clear policies and legal frameworks, is essential. Additionally, knowledge transfer, training, and establishing a partnership forum are crucial to overcoming challenges related to unclear legal frameworks and inefficient implementation processes.

For **researchers and NGOs**, the primary challenges are limited access to national databases, weak connections with stakeholders, and insufficient capacity to mobilize financial resources. These gaps affect all stages of the restoration process, from designing forest restoration plans to implementing and monitoring initiatives. Solutions include improving data access, fostering multi-stakeholder collaboration, and enhancing financial mobilization and resource management capacities. Researchers and NGOs must work closely with state bodies and international organizations to address these challenges through training, workshops, and improved communication strategies to strengthen their roles in the restoration process.

**Opportunities** at all levels include leveraging national commitments, political support, and practical pressures to drive restoration efforts. Viet Nam's restoration roadmap emphasizes the importance of collaboration across all levels—local governments, national bodies, researchers, and NGOs—to implement effective restoration strategies supported by improved communication, capacity building, and stakeholder engagement.

**Detailed results of the discussion are presented in Annex II.**

# ANNEXES

## ANNEX I: AGENDA - CONSULTATIVE MEETING ON A TECHNICAL RESOURCE GUIDE AND ECOSYSTEM RESTORATION INDICATORS FOR TARGET 2 KM-GBF

Time	Description	Lead
<b>Day 1: Wednesday, June 26, 2024</b>		
08:00-08:30	Registration	ICRAF team
08:30-09:00	Introduction and opening	ICRAF organizing team
09:00-10:00	Presentation of Global Framework targets and indicators	ICRAF and FAO
	The new KM-GBF Target 2 and Pilot project	FAO
10:00-10:30	Policy, actions and prospect for ecosystems restoration in Viet Nam	MONRE
10:30 - 10:45	Tea Break	
10:45-11:15	Monitoring Forest Ecosystem Restoration: Plans and Progress	MARD
11:15-12:00	Discussion: Challenges and collaboration for implementation of target 2 in Viet Nam	
12:00-13:30	Lunch	
13:30- 15:00	Mapping restoration priorities, stakeholders, data flows, and institutional arrangements. (Group work)	ICRAF
15:00 - 15:30	Tea Break	
15:30- 16:00	Data and national indicators	MONRE and MARD
16:00-17:00	Discussion	
<b>Day 2: Thursday, June 27, 2024</b>		
8.30- 10.30	Exploring the Target 2 Manual, case study, qualifiers and options for case study	ICRAF
10:30 - 10.45	Tea Break	
10:45-12:00	Viet Nam Case Study Presentation and follow up discussion. 1. Restoring wetland ecosystems in Cat Tien National Park – MSc Pham Ngoc Duong, Cat Tien National Park 2. Community participation in forest ecosystem restoration and biodiversity conservation – Mr Trinh Le Nguyen- PanNature Questions and Discussion	
12:00-13:30	Lunch	
13:30-15:30	Mapping forest ecosystem restoration	Forest Investigation and Planning Institute and FAO
15:30-15:45	Tea Break	
15:45- 17:00	Presentation and overview of the FERM and Interoperability	FAO

Time	Description	Lead
<b>Day 3: Friday June 27 2024</b>		
08:30-10:45	FERM continued + Monitoring tools	ICRAF
10:45 - 11:00	Tea Break	
11:00 - 12:30	Restoration capacity gaps and needs	ICRAF and FAO
12:00-13:30	Lunch Break	
13:30-14:30	Restoration capacity gaps and needs (cont.)	ICRAF and FAO
14:30-15:45	Review and reflection on dialogue (discussing additional topics)	ICRAF
15:45 -16:00	Tea Break	
16:00-17:30	Session review, and presentation of next steps for Viet Nam, workshop report.	ICRAF and FAO



## ANNEX II: SUMMARIES OF BREAK-OUT GROUP DISCUSSIONS

### Session 3: Mapping Restoration Priorities, Stakeholders, Data Flows, and Institutional Arrangements

#### 1. Discussion Results on Forest Ecosystem Restoration

##### Targets for 2030:

- **Sustainable Development Strategy (2021–2030, Decision 523):**
  - Protection and special-use forests: 150,000 hectares/year
  - Planted forests: 340,000 hectares/year
- **Sustainable Development Decision (2021–2025, Decision 809):**
  - Natural forests: 100,000 hectares/year
  - Planted forests: 230,000 hectares/year
- **National Strategy on Biodiversity:**
  - Restore 20% of degraded ecosystems (Decision 149)
- **1 Billion Trees Project (Decision 524):**
  - Plant 310 million trees
- **Coastal Forest Development Project (Decision 1662):**
  - New planting: 20,000 hectares (11,000 hectares for 2021–2025)
  - Forest restoration and enrichment: 15,000 hectares

##### Stakeholders:

- **Forestry Management Agencies:** MARD (Forestry Department, Forest Ranger Department, Sub-Department of Forest Rangers)
- **Forest Owners:** Forest management boards, forestry companies, local communities, households
- **Local Government:** Commune People's Committees
- **Sociopolitical Organizations:** Women's Union, Farmers' Union
- **Private Sector:** Non-state enterprises

##### Restoration Process:

- **Planning:** Develop a plan aligned with the sustainable forest management strategy.
- **Budgeting:** Estimate and approve the budget.
- **Bidding:** Develop and implement bidding documents.
- **Implementation:** Organize and execute the restoration activities.
- **Monitoring and Evaluation:** Continuously monitor and evaluate the restoration process.

##### Restoration Activities:

- Natural forest regeneration
- Supplementary planting
- New planting
- Forest enrichment
- Forest care and protection

**Monitoring Indicators:**

- **Circular 15 on Silvicultural Measures:**
  - Implementation area
  - Survival rate (85%)

**Monitoring Responsibilities:**

- **Project Owner/Forest Owner:** Supervises the implementation.
- **Funding Agency:** Supervises the project owner.
- **Forest Rangers and Local Government:** Participate in monitoring and acceptance.

**Reporting and Data Management:**

- **Data Collection:** Project owners report to local forest protection departments, which then report to provincial sub-departments. Data is synchronized and sent to MARD.

**Challenges and Solutions:**

- **Financial Resources:**
  - **Challenges:** Insufficient and untimely funding.
  - **Solutions:** Socialize financial resources, adjust administrative and financial procedures.
- **Policy Mechanisms:**
  - **Challenges:** Lack of policies to encourage private sector participation.
  - **Solutions:** Develop policy mechanisms to attract private sector involvement.
- **Land Use Conflicts:**
  - **Challenges:** Overlapping traditional and official land use rights.
  - **Solutions:** Redefine boundaries, resettle, and invest in alternative livelihoods.
- **Forest Recovery Indicators:**
  - **Challenges:** Lack of a comprehensive set of forest recovery indicators and specific guidance on forest restoration.
  - **Solutions:** Develop a set of indicators and conduct trials to build restoration models.

**Collaboration Needs:**

- Strengthen relationships and commitments among forest owners, local authorities, rangers, and local communities.
- Establish trials and build models for forest ecosystem restoration.

**Potential Stakeholders who have the ability or important role but have not yet participated in the restoration of this ecosystem:**

- **Private Sector:**
  - **Current Situation:** Limited participation due to lack of incentive policies.
  - **Solution:** Implement incentive policies to attract private sector engagement.

## 2. Discussion Results on Wetland Ecosystem Restoration

### Restoration Targets:

- **Ramsar Sites:** Viet Nam has 13 internationally recognized Ramsar sites. The goal is to increase the protected area of significant wetlands nationwide.
- **Network Efficiency:** Establish and efficiently operate a Ramsar site network, focusing on eco-tourism and environmentally friendly tourism.
- **Control of Land Use Change:** Achieve effective control over 70% of significant wetlands in terms of land use change.
- **Ecosystem Service Payments:** Implement ecosystem service payments for significant wetlands at select Ramsar sites.

### Stakeholders:

- Local communities
- Government (all levels: commune, district, province, ministries, and departments)
- Protected area management boards
- Research institutions (e.g., CRES, Fisheries Institute I and II, Institute of Ecology and Biological Resources)
- NGOs (e.g., WWF, GIZ, IUCN, UNDP, International Crane Foundation)

### Restoration Practices:

- Fisheries management regulations
- Media campaigns
- Livelihood development support
- Vegetation restoration (e.g., reeds)
- Patrolling and protection

### Monitoring and Evaluation Indicators:

- Fisheries harvest yield
- Biodiversity (species/individual counts, including Sarus cranes, endangered fish species, and freshwater crocodiles)
- Sedimentation rate
- Water quality (e.g., COD, BOD, pH, turbidity)
- Number of violations
- Encroachment area

### Data Flow:

Protected Area Management Board reports to Department of Natural Resources and Environment (Provincial level) and Nature and Biodiversity Conservation Agency (NBCA), Ministry of Natural Resources and Environment (National level).

### Policies Supporting Ecosystem Restoration:

- Decision on Investment and Development of Special-Use Forests (No. 24-2012)



**Policies Promoting Degradation:**

- Local water retention regulations for forest fire prevention
- Hydropower planning
- Industrial zone development near nature reserves

**Key Challenges and Solutions:****• Key Challenges**

- Incomplete databases
- Resource shortages (budget and expertise)
- Lack of coordination among governing bodies
- Local development policies
- Lack of specific restoration guidelines
- Community livelihood needs

**• Solutions to Address Challenges**

- Adjust coordination mechanisms: Strengthen coordination efforts
- Support livelihood development: Create new livelihoods to minimize community impact on ecosystems
- Environmental service payments

**Gaps in Organization, Monitoring, and Reporting**

- Lack of specific guidelines
- Inaccurate input data

**Important Collaborations and Coordination Needed:**

- Local community consensus
- Collaboration with research institutions and financial supporters
- Increased awareness among management levels

**Potential Stakeholders Not Yet Involved:**

Currently, no significant stakeholders or roles are identified as being excluded from the restoration efforts.

### 3. Discussion Results on Marine Ecosystem Restoration

#### Targets for restoration by 2030:

- **Marine Economy Strategy (NQ No. 36-NQ/TW):** Focus on sustainable marine development, protecting ecosystems from land to sea, preventing pollution, and restoring ecosystems like coral reefs, seagrass beds, mangroves, and coastal protection forests.
- **National Strategy on Biodiversity:** Aim to restore at least 20% of degraded natural ecosystems, with specific targets for corals and seagrass. By 2030, preserve 3-5% of marine and coastal areas.
- **Aquatic Resource Protection Planning (Decision 389/QĐ-TTg 2024):** Establish 27 marine protected areas covering 463,587 hectares. Create 149 protection zones at sea and 119 inland areas for aquatic resources.

#### Stakeholders:

- **State management agencies:** Central to local agencies, including MARD (Department of Fisheries, Fisheries Surveillance Department), MONRE (NBCA, Department of Seas and Islands) and local governments.
- **Community:** Involvement of local communities.
- **Private Sector:** Companies like Truong Phat involved in innovative conservation practices.
- **NGOs**

#### Implementation Stages:

- **Assessment:** Evaluate the current state of marine ecosystems.
- **Planning and Design:** Develop detailed restoration plans.
- **Implementation:** Execute the planned activities.
- **Management:** Oversee the ongoing restoration efforts.
- **Monitoring and Evaluation:** Continuously monitor progress and evaluate outcomes.

#### Main Activities/Measures:

- **Zoning Protection:** Establish protected zones.
- **Awareness and Education:** Raise awareness among stakeholders about the importance of marine ecosystems.
- **Sustainable Livelihoods:** Promote alternative livelihoods that support conservation.
- **Application of coral restoration technology** (1. Pre-assessment of reef checks; 2. Selection of species for recovery, mainly hard corals; 3. Carry out restoration and relocation of saturated corals to the recovery zone; 4. Measure/count the size of the restoration; 5. Evaluation of effectiveness)

#### Key Indicators for Monitoring:

- **Coral Growth:** Measure coral size growth at 7cm/year and survival rates at 90%.
- **Status Before and After Implementation:** Track changes in ecosystem health, although current indicators are unclear.

#### Reporting and Data Storage:

- **Supervision Agencies:** No official agency for comprehensive reporting; currently managed by sector-specific agencies like the Fisheries Department.
- **Data Reporting:** Reports submitted to superior management agencies, with a need for standardized reporting systems.

**Challenges and Gaps:**

- Lack of legal guidance
- Lack of policies
- Insufficient resources (people, budget)
- Delegating the right to autonomy to the community
- Demand for economic development
- Lack of scientific grounds
- Failing to establish a system from the process of assessment and planning to monitoring, evaluation and reporting.

**Potential stakeholders who have the ability or important role but have not yet participated in the restoration of this ecosystem:**

- Private Sector: Increase involvement of private companies in restoration efforts.
- Military: Engage the army in conservation activities.

## 4. Discussion Results on Restoration of Buffer Zone Ecosystem

**Targets:**

Restore and manage buffer zones, defined as ecosystems outside of forest areas. It aligns with Viet Nam's Decision 149/2022/TTg, which aims to restore at least 20% of degraded ecosystems by 2030.

**Key Stakeholders:**

- Local communities
- Government at various levels
- Agencies and departments
- Social organizations

**Ecosystem Restoration Process:**

- **Survey and Assessment:** Evaluate the current status of land, soil, livelihoods, land use, and biodiversity.
- **Problem Identification and Solution Development:** Create a recovery strategy tailored to each region's needs.
- **Land Use Planning:** Engage in consultation with stakeholders.
- **Capacity Building:** Enhance the skills and knowledge of all stakeholders.
- **Resource Mobilization:** Gather necessary resources for implementation.
- **Implementation:** Organize and execute restoration activities.
- **Genetic Resource Conservation:** Ensure the storage of a minimum of 100,000 genetic resources.

**Monitoring and Evaluation:**

The presentation emphasizes the importance of monitoring and evaluating the restoration efforts using specific indicators, including:

- Number of trees and animals restored per unit area
- Conservation of tree species and genetic resources



- Hydrology and soil quality
- Revenue generation and diversification of income sources
- Health indicators related to ecosystems
- Awareness and capacity-building measures

#### **Monitoring Responsibilities:**

Monitoring responsibilities are distributed across two ministries: MARD and MONRE.

- Forest and Agricultural land: From commune agricultural officers to MARD.
- Biodiversity: From commune people's committees to the MONRE.

#### **Data flow:**

##### **Agriculture**

Commune Agricultural Officer → District Agriculture Department → Provincial Department of Agriculture and Rural Development → Ministry of Agriculture and Rural Development (Department of Crop Production)

##### **Biodiversity**

Commune People's Committee → District Department of Natural Resources and Environment → Provincial Department of Natural Resources and Environment → Ministry of Natural Resources and Environment (Nature and Biodiversity Conservation Agency)

#### **Challenges**

Several challenges to successful ecosystem restoration were identified:

- Lack of stakeholder awareness
- Inadequate policy mechanisms
- Insufficient prioritization of resources (both human and financial)
- Poor coordination among stakeholders
- Missing and unstructured database resources
- Lack of technical documentation and pilot models

#### **Proposed Solutions**

- Policy Development: Create relevant mechanisms and guiding documents for implementation.
- Experience Sharing: Engage in international learning and sharing of best practices.
- Pilot Models: Build and study pilot models to demonstrate effective restoration strategies.
- Training and Capacity Building: Enhance awareness and capacity among stakeholders.
- Data Management: Develop a structured system for managing and sharing data.

## Session 10: Capacity Gaps in Viet Nam

At local level	Gap (list and any missing?)	Restoration process step?	How is this gap hindering Viet Nam's restoration effort?	Solutions (what activity or intervention takes place?)	Who would have to do/implement this	Timeline (short, medium, long)	Opportunities
	Finance	Engage sectors and stakeholders in restoration planning and implementation	<ul style="list-style-type: none"> <li>Lack of money</li> <li>Financial procedures are still complicated</li> </ul>	<ul style="list-style-type: none"> <li>Diversification of funding sources: Agriculture, socialization</li> <li>Simplify procedures</li> </ul>	<ul style="list-style-type: none"> <li>Government</li> <li>Social organizations</li> </ul>	Long-term (5 years)	
	Senior policymakers		<ul style="list-style-type: none"> <li>Not synchronized</li> <li>Difficult to apply in practice</li> </ul>	<ul style="list-style-type: none"> <li>Policy review</li> <li>Unify for synchronization between sectors</li> </ul>	<ul style="list-style-type: none"> <li>Government</li> <li>Relevant ministries and sectors</li> </ul>	Short-term and medium-term	
	Local/local government		<ul style="list-style-type: none"> <li>Coordination with forest owners has not been close</li> </ul>	<ul style="list-style-type: none"> <li>Promote &amp; strengthen coordination by rules and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Local government</li> <li>Forest Protection Unit</li> </ul>	Regular	
	Senior assessment	Ecosystem degradation assessment and mapping	<ul style="list-style-type: none"> <li>Assessment capacity is still limited</li> </ul>	<ul style="list-style-type: none"> <li>Work plan and estimate</li> <li>Training</li> <li>Procurement and replenishment of equipment</li> </ul>	<ul style="list-style-type: none"> <li>Consulting Agency</li> <li>Forest Protection Unit</li> </ul>	5 years	
	Supply chain, market and value chain development	Support for restoration implementation	<ul style="list-style-type: none"> <li>Product Selection</li> <li>Product Origin</li> <li>Market Assessment</li> <li>Community involvement in the market chain</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building</li> <li>Model pilot</li> <li>Trademark registration, branding</li> </ul>	<ul style="list-style-type: none"> <li>Levels of government</li> <li>Beneficiary communities</li> </ul>	5 years	
	Selection of appropriate indicators to monitor and evaluate recovery activities for specific contexts and ecosystems	Restoration monitoring	<ul style="list-style-type: none"> <li>Difficult to determine the evaluation index</li> <li>Tools for evaluating metrics</li> </ul>	<ul style="list-style-type: none"> <li>Training</li> <li>Technical Support</li> </ul>	<ul style="list-style-type: none"> <li>FAO, ICRAF, etc.</li> <li>State management bodies</li> <li>Scientist</li> </ul>	1-5 years	

National level	Gap (list and any missing?)	Restoration process step?	How is this gap hindering Viet Nam's restoration effort?	Solutions (what activity or intervention takes place?)	Who would have to do/implement this	Timeline (short, medium, long)	Opportunities
	<p>Awareness of priorities for the implementation of Ecosystem Restoration (ER) e.g., planning and budget allocation are not specific</p> <ul style="list-style-type: none"> <li>Coordination in planning, investment, and implementation</li> <li>Focal point (disconnected)</li> <li>Knowledge/science connection and implementation decision-making</li> <li>The legal framework is not clear</li> </ul> <p>Incentive mechanisms and favourable environment for private and social workers to participate in ER</p> <ul style="list-style-type: none"> <li>Stipulating functions and tasks for management and implementation agencies</li> <li>Leadership and implementation guidance</li> </ul>	<p>Restoration process step?</p> <p>Stage of developing strategies, master plans and plans</p> <p>Stage of developing policy and legal frameworks and implementation guidelines</p> <p>Stage of planning, implementation, and supervision of implementation</p> <p>The stage of developing the policy and legal framework</p> <p>Stages of policy development, implementation and supervision</p>	<ul style="list-style-type: none"> <li>(Attitude) Not ready</li> <li>No commitment</li> <li>Lack of foundation to promote implementation</li> <li>Lack of legal and technical tools for implementation</li> <li>Lack of consensus/conflict</li> <li>Difficult to implement or deviated, inefficient, wasteful</li> <li>Difficult to mobilize resources – technical and financial</li> <li>Difficult to implement, hindering coordination</li> <li>Difficulties in leadership, direction, and implementation orientation</li> </ul>	<ul style="list-style-type: none"> <li>Promoting national interest, commitment, and political responsibility from the Central Committee</li> <li>Communication</li> <li>Social Advocacy</li> <li>Establishing a policy, legal, financial – public, participatory framework</li> <li>Developing guidance, training and knowledge transfer</li> <li>Partnership Forum</li> <li>Open policy, incentive mechanism (tax)</li> <li>Modifying and completing regulations on functions and tasks of state management agencies</li> </ul>	<p>FAO, UNDP, MONRE, MARD, Viet Nam TV, Voice of Viet Nam, Viet Nam News Agency, supporting organizations</p> <p>MONRE, MARD</p> <p>MONRE, MARD, supporting organizations</p> <p>MONRE, MARD, supporting organizations</p> <p>Ministries/sectors</p>	<p>Short-term: Pilot Expansion: Medium to long-term</p>	<p>OPPORTUNITIES</p> <ol style="list-style-type: none"> <li>1. National commitments</li> <li>2. Practical pressure</li> <li>3. Political support of the Central Committee (resolution); National Strategy</li> <li>4. Draft planning for biodiversity and forestry</li> </ol>



Gap (list and any missing?)	Restoration process step?	How is this gap hindering Viet Nam's restoration effort?	Solutions (what activity or intervention takes place?)	Who would have to do/implement this	Timeline (short, medium, long)	Opportunities
Researcher-NGOs						
Access to national databases is still limited	- Designing forest restoration processes	<ul style="list-style-type: none"> <li>Review of areas in need of restoration and priority for forest restoration</li> <li>Financial estimates for forest restoration</li> </ul>	<ul style="list-style-type: none"> <li>Have specific guidelines for publicizing data management units to access data more easily</li> </ul>	State	Long-term	There is international support to reach out
Weak access and connections to stakeholders	All steps	Impact on resource mobilization and stakeholder commitment	<ul style="list-style-type: none"> <li>FPIC</li> <li>Benefit-sharing mechanism</li> <li>Networking community</li> </ul>	All stakeholders	Medium	Resources
The ability to find consensus among stakeholders is weak between state management agencies, NGOs, local communities and businesses	All steps	Conflicts of interest between the parties, commitments are not well implemented.	<ul style="list-style-type: none"> <li>Host multi-party meetings</li> <li>Providing full information, benefits, and transparency in sharing benefits</li> </ul>	Units that carry out activities	Short	Supporting financial and state resources in terms of policies and participation of stakeholders
Access to national databases is still limited	Designing forest restoration processes	<ul style="list-style-type: none"> <li>Review of areas in need of restoration and priority for forest restoration</li> <li>Financial estimates for forest restoration</li> </ul>	<ul style="list-style-type: none"> <li>Have specific guidelines for publicizing data management units to access data more easily</li> </ul>	State	Long-term	There is international support to reach out
Weak access and connections to stakeholders	All steps	Impact on resource mobilization and stakeholder commitment	<ul style="list-style-type: none"> <li>FPIC</li> <li>Benefit-sharing mechanism</li> <li>Networking community</li> </ul>	All stakeholders	Medium	Resources
The capacity to access financial sources and mobilize domestic capital is still limited	The first step to implement the activity	Impact on survey activities, intervention activities, scale and time to recovery, sustainability of activities	<ul style="list-style-type: none"> <li>To socialize the restoration of forests and capital sources.</li> <li>Strengthen communication capacity to stakeholders</li> <li>Enhance the responsibilities of stakeholders in forest restoration</li> <li>Have a specific model</li> </ul>	Units organizing forest restoration activities	Long	<ul style="list-style-type: none"> <li>Improving the capacity to access capital, the prestige of the organization is increased</li> <li>Social participation in forest restoration</li> <li>Access to priority funding sources</li> </ul>
The capacity to build the image of the organization and the media is still limited	All steps	Mobilizing resources and stakeholder engagement	<ul style="list-style-type: none"> <li>Improve communication activities to promote images</li> <li>Carry out forest restoration activities</li> </ul>	Organizer	Medium	Raising voices and gaining access to better forest restoration resources

## A T2 Roadmap for Viet Nam

Levels	A collaborative road map towards effective restoration in Viet Nam.....
Local level	<ul style="list-style-type: none"> <li>• Submit to superiors about the complexity and difficulties when implementing the current financial mechanism</li> <li>• Calling for cooperation/support from sources: government, social welfare, NGOs</li> </ul>
	<ul style="list-style-type: none"> <li>• Proposal to establish a working group to represent the local group</li> <li>• Gathering local recommendations</li> </ul>
	<ul style="list-style-type: none"> <li>• Develop a coordination mechanism</li> <li>• Evaluating the effectiveness, supplementing and amending the regulation</li> </ul>
	<p>Ecosystem assessment:</p> <ul style="list-style-type: none"> <li>• Review the weak and lacking aspects of local officials</li> <li>• Training, supplementing and improving the weak/lacking capacities above</li> <li>• Pilot implementation of ecosystem assessment, with study tours</li> </ul>
	<p>Developing supply chains, markets and value chains:</p> <ul style="list-style-type: none"> <li>• Training knowledge and skills in supply chains</li> <li>• Selection of points/objects to pilot the model</li> <li>• Trademark registration and branding</li> </ul>
	<p>Selection of appropriate indicators to monitor and evaluate recovery activities for specific contexts and ecosystems:</p> <ul style="list-style-type: none"> <li>• Training on ecosystem restoration: Providing knowledge and skills</li> <li>• Technical and financial support</li> </ul>
National level	<ul style="list-style-type: none"> <li>• Gaining political support and determination – restoring biodiversity becomes a strategic priority in Viet Nam's environmental protection and environmental protection action to 2030</li> </ul>
	<ul style="list-style-type: none"> <li>• The high-quality National Programme for ecosystem restoration is developed and implemented in accordance with international commitments and national strategies/actions</li> </ul>
	<ul style="list-style-type: none"> <li>• National capacity and institutions on ecosystem recovery promote cooperation, collective, inclusive/intersectoral action, and engage all stakeholders</li> </ul>
	<ul style="list-style-type: none"> <li>• Outcomes/targets for recovery of degraded ecosystem (minimum 20%) are realized, sustainable, monitored-evaluated, innovative, based on learning processes and adaptive management</li> </ul>
	<ul style="list-style-type: none"> <li>• Ensuring and increasing benefits for communities, society and stakeholders from HST recovery efforts/outcomes, promoting recovery efforts to 2050</li> </ul>
Researchers/NGOs	<ul style="list-style-type: none"> <li>• Completing the mechanism for accessing the forest restoration database systematically and transparently</li> <li>• Training to improve data access capacity</li> <li>• Developing guidelines for access to forest restoration databases</li> </ul>
	<ul style="list-style-type: none"> <li>• Consultation with stakeholders on plans, methods, organization, supervision and evaluation</li> <li>• Identify focal points for recovery activities</li> <li>• Sharing information through conferences, seminars, reports</li> <li>• Training information sharing tools such as FERM</li> </ul>
	<ul style="list-style-type: none"> <li>• Communication and propaganda to raise awareness</li> <li>• Organizing multi-stakeholder meetings and seminars</li> <li>• Agreement on a benefit-sharing mechanism between parties</li> </ul>
	<ul style="list-style-type: none"> <li>• Training to improve capacity in approaching and managing financial efficiency, planning, monitoring and evaluation.</li> <li>• Expanding domestic and foreign networks</li> <li>• Build a dedicated fundraising department</li> </ul>
	<ul style="list-style-type: none"> <li>• Building images and communication about the organization of forest restoration: Designing posters, reports, leaflets, slogans .....</li> <li>• Organizing communication activities, seminars to introduce the organization and related activities</li> </ul>

## ANNEX III. PARTICIPANTS LIST

Full Name Of Delegates	Organization
Nguyen Dinh Tho	Institute of Strategy and Policy on Natural Resources and Environment, MONRE
Nguyen Xuan Dung	NBCA, MONRE
Nguyen Van Thuy	Centre For Environment and Biodiversity Information and Data (CEBID), MONRE
Mac Thi Minh Tra	CEBID, MONRE
Nguyen Danh Thanh Hai	Forest Protection Department, MARD
Cao Xuan Y	Forest Protection Department, MARD
Pham Minh Long	Forestry Department, MARD
Nguyen Thi Phuong Dung	Department of Fisheries, MARD
Nguyen Thi Kim Tu	Department of Fisheries, MARD
Nguyen Mai Huong	Department of Fisheries, MARD
Hoang Cong Thang	Silviculture Research Institute, Viet Nam Academy of Forest Science
Yelena Finegold	FAO, Rome
Nguyen Van Chien	FAO Viet Nam
Khalil Walji	CIFOR-ICRAF
Nguyen Quang Tan	CIFOR-ICRAF
Truong Thi Anh Tuyet	CIFOR-ICRAF
Dang Thanh Phuong	UNDP Viet Nam
Nguyen Cong Minh	GIZ
Nguyen Thi Nhung	GIZ
Nguyen Thi Thu Thuy	SNV
Trinh Le Nguyen	PanNature
To Bich Ngoc	PanNature
Chau Van Hue	Centre for Highland Natural Resource Governance Research (CEGORN)
Tran Huu Nghi	Tropenbos Viet Nam
Ho Thi Yen Thu	MCD
Le Vinh Thuan	Management Board of Cu Lao Cham Marine Protected Area
Pham Ngoc Duong	Cat Tien National Park
Tran Thi Hong Hanh	Xuan Thuy National Park
Nguyen Manh Cuong	Cuc Phuong National Park
Nguyen Phuc Uoc	Tram Tau district protection forest management board
Pham Van Nam	Ba Be National Park Management Board
Pham Van Dan	Bidoup - Nui Ba National Park
Duong Van Nha	U Minh Ha National Park
Nguyen Hoang Minh Hai	Tram Chim National Park
Nguyen Van Hai	Centre for Rescue, Conservation and Development of Organisms - Phong Nha - Ke Bang National Park Management Board
Nguyen Thuy My Linh	Research Institute for Forest Ecology and Environment (RIFEE), part of the Viet Nam Academy of Forest Sciences (VAFS)



Le Thi Nhu Ngoc	Bach Ma National Park
Do Thi Huong	Centre for Sustainable Rural Development Research, University of Forestry
Do Van Tu	Institute of Ecology and Biological Resources
Tran Hong Van	Silviculture Research Institute
Ho Thu Minh	Institute of Fisheries Economics and Planning
Nguyen Thi Thuy Anh	Forestry University
Hoang Ngoc Y	Forestry University
Nguyen Thi Thuy Anh	Forestry University
Do Anh Tuan	Forestry University
Doan Thanh Tung	Forest Ecology and Environment Research Institute
Truong Quang Tr	Institute for Research on Ecology and Forest Environment

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