

## Forest Landscape Restoration in the Asia-Pacific Region

### Monitoring, Reporting, and Verification in Forest Carbon Assessment

#### BACKGROUND

The UN Decade on Ecosystem Restoration (2021-2030) has placed a crucial spotlight on the urgent need to restore degraded forests. Millions of hectares of forests are in a state of degradation, jeopardizing the livelihoods and even lives of countless people who rely to varying degrees on these forests. It is now an urgent global challenge to achieve substantial progress in restoration during this decade.

Achieving 'Net Zero' goals by a specified year is emerging as a fundamental component of the Nationally Determined Contributions (NDCs), and forest restoration efforts will eventually yield multiple benefits. Not only will they unlock vast climate change mitigation potential by significantly sequestering atmospheric carbon dioxide, they will also enhance our ability to adapt to global warming.

Article 6 of the Paris Agreement offers a pathway to reduce greenhouse gas (GHG) emissions through cooperative and market mechanisms, generating Internationally Traded Mitigation Outcomes (ITMOs) from activities that reduce human-induced GHG emissions and sequester carbon dioxide. The World Bank estimates that trading in ITMOs could cut the costs of reaching the NDC targets by more than half, resulting in potential savings of up to \$250 billion by 2030 due to significant cost differentials across jurisdictions and activities<sup>1</sup>. To fully harness the provisions and possibilities of Article 6 in forest and forestry sector, it is critically important for countries in the Asia-Pacific region to strengthen the capacities of their implementing organizations and other relevant institutions in the field of forests and other lands.

Since 2021, AFoCO and ITTO have been jointly conducting capacity-building workshops for government officials from these countries focused on Forest Landscape Restoration (FLR), by adapting the content each year to align with the specific needs perceived by countries in the region<sup>2&3</sup>.

In the third AFoCO-ITTO joint capacity-building workshop in 2023, the emphasis was on monitoring, reporting, and verification (MRV) of carbon sequestration assessments in FLR projects. This focus is expected to bolster the attractiveness of FLR projects for increased market investments. The workshop provided a valuable platform

#### Key Messages

1. Raising policymakers' awareness of how FLR can help achieve carbon-neutral commitments is crucial.
2. Encouraging communities to collaborate on restoration efforts is key to success.
3. Leveraging Article 6.2 of the Paris Agreement can expedite FLR implementation.
4. The voluntary carbon market holds the promise of making FLR more appealing to communities.
5. Accelerating FLR readiness through capacity building using non-market approaches is vital.
6. Effective MRV requires a thorough assessment of the baseline.
7. Cost-effective monitoring should be an ongoing learning process.

for FLR implementers in the Asia-Pacific region to exchange experiences and lessons learned from their FLR initiatives, engaging with internationally recognized experts in various aspects of forest landscape restoration.



<sup>1</sup> World Bank (2022) What You Need to Know About Article 6 of the Paris Agreement. <https://shorturl.at/osuOX>

<sup>2</sup> AFoCO and ITTO (2022) FLR in the Asia-Pacific Region: Promoting inclusive and integrated community-based FLR interventions in support of the UN Decade on Ecosystem Restoration 2021-2030. <https://shorturl.at/afovX>

<sup>3</sup> AFoCO and ITTO (2023) FLR in the Asia-Pacific Region: Accessing climate finance and carbon benefits for FLR under Article 6 of the Paris Agreement. <https://shorturl.at/fgirl>.

## POLICY HIGHLIGHTS

This policy brief summarizes the collective knowledge gained from participants' country presentations, discussions, and interventions at the workshop. It highlights key policy lessons, aimed at accelerating and improving the quality of restoration efforts in the region's countries.

### 1. Enhance awareness among policymakers about the benefits of FLR for achieving carbon-neutral commitments.

In most countries within the region, with a few exceptions, there is not much appreciation among the policymakers about the importance of FLR and its potential benefits for enriching soil quality, fostering rural livelihoods, and fulfilling zero-carbon commitments. This lack of recognitions among the policymakers becomes a main hindering factor to take up FLR on a larger scale, even when numerous forestry professionals emphasize its imperative need. These unfortunate situations result in an insufficient level of institutional readiness for restoring degraded lands. Consequently, the forestry departments often find themselves stuck in a repetitive cycle of business-as-usual afforestation as part of their annual budget, rather than embracing more comprehensive and sustainable FLR practices.

It is crucial to build up awareness about the role of landscape restoration and reversing soil degradation in prolonged economic development and in meeting climate change commitments among the policy makers and other influential figures in the country. To achieve this, a concerted effort is required, including organizing numerous conferences and workshops in collaboration with national and international entities possessing expertise in the field. These events must help enlighten key stakeholders about the pressing need for and the immense benefits of FLR in improving the economic well-being of the nation.

### 2. Promote use of Article 6.2 of Paris Agreement to hasten implementation of FLR.

Article 6 of the Paris Agreement enables countries to cooperate with each other voluntarily in the achievement of their nationally determined contributions and its Paragraph 2 specifically allows countries to enter into bilateral or multilateral agreements under which the ITMO achieved in one or more countries could be used for meeting the NDC targets of other countries that form part of that agreement subject to rigorous conditions of environmental integrity and transparency and avoidance of double counting.

In the transfer of ITMOs by bilateral agreements through programs and/or projects under cooperative approaches, capacity building is a critical component. The donor country may provide training, technical assistance, and knowledge exchange opportunities to build the recipient country's capacity in project development, MRV, and other essential aspects of forestry related ITMO generation. Some bilateral REDD+ projects of Japan and the Republic of Korea have been already introduced in the previous policy brief<sup>3</sup>.

### 3. Speed up FLR Readiness through capacity building using non-market approaches.

Article 6.8 of the Paris Agreement pertains to non-market approaches designed to help countries achieve their NDC targets through capacity building, technology transfer, direct financing, and other means. The goal is to strengthen a country's dedication to both mitigating climate change

and adapting to its effects while also encouraging greater involvement from both the public and private sectors in the implementation of the country's NDCs.

The said Article can serve as a mechanism to raise finance from the private sector for capacity building for FLR at scale. For this, government entities or implementing agencies must engage and persuade the private sector industries with significant carbon and other environmental footprints to provide finances for various aspects of FLR capacity building.

#### BOX 1. Japan Fund for the Joint Crediting Mechanism

The Japan Fund for the Joint Crediting Mechanism (JFJCM) is a dedicated trust fund established in 2014 under the Asian Development Bank (ADB) to promote the adoption of advanced low-carbon technologies. This fund serves a dual purpose by offering both grants and technical assistance (TA).

One noteworthy application of the JFJCM is its potential to facilitate the integration of MRV technologies into eligible forest landscape restoration projects across various countries in Asia. Beyond its regional reach, this fund aligns with global climate change and development initiatives such as the Paris Agreement and the Sustainable Development Goals (SDGs).

The participating countries in the region include Azerbaijan, Bangladesh, Cambodia, Georgia, Indonesia, the Kyrgyz Republic, Lao PDR, Maldives, Mongolia, Palau, Papua New Guinea, the Philippines, Sri Lanka, Thailand, Uzbekistan, and Viet Nam.

#### BOX 2. Korea Green Growth Trust Fund

The Korea Green Growth Trust Fund (KGGTF) is a partnership between the World Bank Group and the Republic of Korea. Formed in 2011, KGGTF fosters collaborations and cross-learning about climate-smart and green technologies, policies, and methods that may support client countries' sustainable development plans and green growth strategies.

In the forestry sector, the KGGTF projects have focused on enhancing the capabilities of national forest institutions to adopt an integrated landscape approach in forest management planning and execution. KGGTF further emphasizes the utilization of information technologies to inform strategic decision-making and planning within the forestry sector. This multifaceted approach aligns with broader green growth and SDGs.

In Asia, the KGGTF is expanding its partnership in forestry, wherein AFoCO currently is exploring potential areas of collaboration stepping on the joint e-learning course development.

#### **4. Conduct baseline assessments to ensure effective MRV.**

Countries are required to define a Forest Reference Emission Level (FREL) or Forest Reference Level (FRL) as a benchmark for assessing performance in implementing REDD+ activities, guided by the Warsaw framework. Many developing countries have already gained experience in creating and reporting their FREL/FRL assessments, typically at the national or, in some cases, sub-national provincial levels. However, the challenge arises when planning FLR projects, because the landscapes identified for restoration often constitute just a tiny part of the country's total land area, making these national or even subnational reference levels inappropriate.

To address this, it is essential to establish specific landscape-wise baselines. In order to reduce complexities in this assessment, it needs to consider the current carbon content of the landscape to be taken up for FLR as the baseline, consisting of above and below-ground biomass, litter, soil organic matter, and deadwood. In the case where the landscape to be restored is large and under the domination of several geographically separated communities, it would be good to have two or more separate baselines for physically delineated parts of such landscapes which should then be treated separately for MRV purposes. This would not only ease baseline assessment but also help in a more acceptable distribution of the result-based benefits of the restoration project among the communities in line with their actual contributions.

#### **5. Get the communities to work together towards restoration.**

Obtaining a free and prior informed consent (FPIC) of a community in an unhurried manner is an effective way of getting its cooperation and long-term commitment for undertaking restoration of degraded forest landscapes. Even a moderately sized restoration project involves multiple communities with various interests, some of which may conflict with one another.

It may not be sufficient to just to have the FLR implementing agencies arrive at an agreement of cooperation with the communities to work for restoration of the degraded forest landscapes. It is equally important for the communities between themselves to agree on the restoration objectives and the processes. This is where the implementing agencies must play a pivotal role, not only facilitating agreements but also initiating a robust conflict resolution mechanism to address potential issues that may arise in the future.

#### **6. Ensure monitoring is cost-effective and facilitates continuous learning.**

Carbon credits generated through FLR would fetch attractive prices only when their environmental integrity is unquestionable. The IPCC has laid down elaborate protocols for the measurement of carbon gains and losses in vegetation, soils, litter, and harvested wood products and for reporting and verification of these assessments. However, in many countries across the Asia-Pacific region, there is very little expertise in MRV. As a result, countries often have to incur high costs to import this expertise.

To address this challenge, there is a need to rapidly build MRV capacity among forestry and agriculture professionals in this region. Although there are various existing capacity building programs run by international organizations, more collaboration is needed in promoting and supporting such initiatives. This should be accompanied by including the communities as well, in aspects of increasing the efficiency in the monitoring progress. Yet, the participation of communities should not dilute the monitoring quality or integrity, wherein the portion of community participation should be expanded gradually as experience is gained. In addition to reducing costs, this approach makes monitoring a continuous learning process for communities, ultimately improving the quality of restoration efforts.

#### **7. Leverage the potential of the voluntary carbon market to make FLR appealing to communities.**

FLR provides communities with the opportunity to create not only highly valuable biomass assets but also carbon sinks generating large volumes of carbon credits. These carbon credits can be traded in either "compliance" markets that are driven by binding emission reduction targets such as the one mandated by the Kyoto Protocol, or "voluntary" markets which serve the need for voluntary offsetting of greenhouse gas emissions by corporates or individuals.

The voluntary markets preceded the compliance markets, and have continued to grow alongside them, in response to the emerging need of all kinds of business and even non-business organizations for establishing their net zero emission status.

In the perspective that high costs incurred in obtaining approvals and in MRV which require internationally certified auditors, some professionals address that the voluntary markets can be more cost-efficient than the treaty-mandated compliance carbon markets. These costs could be lowered further through more automated MRV in which the local communities are able to make the required field observations and data collection. It is for this reason there has been a solid argument that the availability of domestic voluntary carbon markets can be a game-changer in promoting FLR in community-owned landscapes.

## THE WAY FORWARD

The concept of result-based payments encapsulated in the climate change agreements has the potential to make FLR an economically attractive activity for communities. However, the prohibitively high costs associated with the MRV processes remain a significant barrier that needs urgent attention in the region.

A rapid and integral approach for capacity building in fostering the MRV expertise of countries should be done by a continuous process of sharing knowledge and experiences in the extent and quality of FLR in the region. At the national level, enhanced communication and collaboration are essential across disciplines, among experts, between scientists, land managers, and communities. This cooperation should also extend to government agencies, the private sector, and civil society organizations. This can be achieved by establishing protocols for information collection and synchronizing data, and by the conduct of regular training programs, seminars, workshops, conferences, and social campaigns. Furthermore, international entities need to more actively provide technical and financial support to facilitate this process. This support helps stakeholders discover valuable insights from successful practices around the world in utilizing scientific, local, and traditional knowledge for landscape restoration.

Over the past three years, AFoCO and ITTO have collaborated through joint workshops to explore and identify the demands and needs of the member countries in the region. Now it is the time for developing a regional-based proposal that is financially viable, which will significantly bolster the region's capacity in implementing the FLR and addressing climate change.

## BOX 3. Workshop Summary

AFoCO-ITTO joint capacity building workshop on 'Forest Landscape Restoration in the Asia-Pacific Region: Monitoring, Reporting, and Verification in Forest Carbon Assessment' was virtually organized from 4 to 6 July, 2023. The workshop welcomed 55 participants from 17 countries: Bhutan, Brunei Darussalam, Cambodia, Fiji, India, Indonesia, Kazakhstan, Kyrgyz Republic, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, Timor-Leste, and Viet Nam.

The workshop included two keynote addresses and six sessions regarding Article 6 of the Paris Agreement, climate change financing mechanisms and REDD+ projects, MRV framework and challenging issues linked to FLR intervention which are presented by experts from Bogor Agricultural University of Indonesia (IPB), Institute of Green Economy of India, International Union for Conservation of Nature (IUCN), Kasetsart University of Thailand, Korea University of the Republic of Korea, Ministry of Environment, Forestry, and Climate Change of India, Waseda University of Japan, ITTO and AFoCO.

The workshop aimed to:

- Enhance understanding of the MRV in forest carbon assessment, and
- Improve the FLR implementers' knowledge on the role of Article 6 of the Paris Agreement in promoting FLR.

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### **Asian Forest Cooperation Organization**

AFoCO is a treaty-based intergovernmental organization that is committed to strengthening forest cooperation and taking concrete actions to promote sustainable forest management and address the impacts of climate change.

[www.afocosec.org](http://www.afocosec.org)

### **International Tropical Timber Organization**

ITTO is an intergovernmental organization promoting the sustainable management and conservation of tropical forests and the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests.

[www.itto.int](http://www.itto.int)