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Agenda Item 8

Updates on the Capacity Building Activities

Development of AFoCO Capacity Building Roadmap

1. One of the objectives of Asian Forest Cooperation Organization (AFoCO) is capacity building of stakeholders through implementing research and development, sharing experiences, transferring technology, and conducting education and exchange programs, in accordance with Article 3 of the Agreement on Establishment of AFoCO.

2. Pursuant to the follow-ups on the Institutional Review of AFoCO at the Fourth Session of the Assembly (A-4-IV-20R), the Secretariat develops a capacity building roadmap (hereinafter referred to as "the Roadmap"). This is an improved proposal based on the Secretariat's plan to develop a new long-term capacity-building strategy reported at the said Session of the Assembly.

3. The Roadmap is expected to form part of a new capacity-building strategy within defined areas that contribute to the niche of AFoCO. Particularly it is closely related to a current task of the Secretariat on the new Strategic Plan of AFoCO, that is far-reaching and long-term. It will also include the potential roles of the Regional Education and Training Center (RETC) as a subsidiary organ of the AFoCO Secretariat.

4. The Roadmap is further expected to contribute to another ongoing task of the Secretariat to enhance the organization's Resource Mobilization Strategy (A-7-IV-20R).

RETC Operation and Management in 2021

Operation and Management Security under COVID-19

5. Currently, the RETC is not open to the public, and its security is covered by the Forest Department of Myanmar (FD). Twenty seconded governmental officials from the FD and nine local staff are working for the RETC. Upon the situation is stable, a Program Officer of the Secretariat will be dispatched accordingly.

6. The FD has regularly updated the prevention and control protocol/arrangements for the COVID-19 in Myanmar. Only those who received special approval from the government of

Myanmar are permitted to enter the country according to the rules and regulations of the government.

7. Under the third wave of COVID-19 in Myanmar, the RETC is helping spray disinfectants using its fire vehicles for neighboring areas. The center is also communicating with nearby village authorities about utilizing the RETC's fire vehicles to support quarantine activities in village compounds. These forest fire vehicles were donated by the Korea Forest Service in 2018 for training and demonstration purposes in the RETC's regular training courses on forest fire management.

8. The Secretariat has been organizing weekly technical-level discussions and monthly director-level meetings with the FD to address such operational issues on the RETC and project matters in Myanmar.

Establishment of AFoCO Experimental Forest

9. The RETC will select an institute to conduct the design works for the establishment of AFoCO Experimental Forest (119 ha) in November 2021 through a competitive bidding process in accordance with the Financial Regulations of AFoCO.

10. During the first semester in 2022, the RETC will organize the International Workshop on the Establishment of the AFoCO Experimental Forest and explore prospective partners to build up a research network to utilize the Experimental Forest in a long-term view.

Updates on Education and Training Programs

11. Considering the COVID-19 pandemic, the training plan for 2021 was revised to prioritize the regular training that can be effectively implemented through an online platform (Annex-1). Compared to the ten face-to-face training in 2019-2020, the five virtual programs in 2021 have shown potential in bringing a large number of participants with fewer administrative procedures (Annex-2 and Annex-3).

12. Capacitating the advantages of online platforms, the RETC actively responded to the higher demands of the Member Countries in enhancing capacities for project development, including national roll-out sessions. The RETC pursued training programs' outputs to be focused on producing baselining data for project/program development. Accordingly, the Policy Brief per training subject has been published to browse the current status of Member Countries, which is expected to be resources for the strategic planning of the organization. All these are aiming at the Systems View in a cross-cutting manner. The compiled working document of four (4) policy briefs is annexed (Annex4).

13. The RETC will facilitate training programs through hybrid manners in 2022. In line with lessons learned from the operation of training, the RETC will start the development of its online campus as a solid virtual platform to expand the impact of capacity building in the forests and forestry sector. The comparison of format, target, expected outputs, and deliverables are shown in the table below.

Year	2019-2020	2021	2022
Format	Face-to-face	Virtual	Hybrid
Target	Two nominated gov. officials	- Same as 2019-2020 - Additional gov. officials who want to participate	- Same as 2021 - Anyone enrolls the e-learning course at the online campus, a solid virtual platform
Expected outputs	Good understanding and knowledge of the training topic	- Same as 2019-2020 - Capacity building in project development - Encouragement on the baselining data production for the concerned topic	- Same as 2021 - Technical tuning on learning materials & module
Deliverables	Training report	- Training report, focusing on the validated baselining data - Policy Brief - Concept notes on the regional programme	- Same as 2021 - E-learning materials to be utilized at the online campus

Establishment of an Organizing Committee for High-Level Workshop on Forest-related Disaster Management and Impacts of Climate Change in 2022

14. The RETC will organize the High-Level Workshop on Forest-related Disaster Management and Impacts of Climate Change in the second semester of 2022. The workshop aims to endorse a regional initiative on forest-related disaster management for AFoCO Member Countries.

15. For the fruitful outcomes of the High-Level Workshop, the RETC will organize an Organizing Committee inviting the Member Countries to review and improve a concept note on the regional initiative. The said concept note will be developed on the basis of the information provided by the Member Countries participating in the training course on Forest Fire Management Information System, which is organized on 1-5 November 2021.

Update on the Science and Technology Exchange Partnership (STEP) Program in 2021

16. Four technical-level government officials/researchers in the field of forest plant biodiversity from Brunei Darussalam, Cambodia, Kazakhstan, and Thailand were selected for the STEP Program in 2021. However, due to the COVID-19 pandemic, and upon consultation with the participants, the program has been postponed to 2022. Therefore, the candidates selected in 2021 will participate in the program with the candidates for 2022 together. The status of the Member Countries participating in the STEP program is annexed (Annex-5).

Update on the Landmark Scholarship Program in 2021

17. Two (2) scholarship recipients from Thailand graduated in 2021, one doctoral course and one master's course respectively.

18. Two (2) new scholarship candidates were awarded the Landmark scholarship and started the courses at universities in Korea from March, 2021, each from Indonesia for doctoral courses and the Philippines for master's courses. The status of the Member Countries participating in the Landmark Scholarship Program is annexed (Annex-6).

Update on AFoCO Fellowship Program in 2021

19. Pursuant to the Decision 33-III-19R adopted by the Third Session of the Assembly held on 28-29 October 2019, the AFoCO Fellowship Program has been running into two (2) batches each with a term of six months from January to June and July to December.

20. The Secretariat welcomed three (3) Fellowship Officials (FOs) from Indonesia, Timor-Leste, and Viet Nam for the 1st half batch and four (4) FOs from Bhutan, Cambodia, Mongolia, and Myanmar for the 2nd half batch. Out of selected officials for 2021, two (2) FOs from Thailand and Brunei Darussalam will commence their duty at the Secretariat in the same batch of 2022 by their official request. The status of the Member Countries participating in the Fellowship Program is annexed (Annex-7).

21. In accordance with the Decision 40-IV-20R Work Plan and Budget 2021 adopted by the Fourth Session of the Assembly held on 25-26 November 2020, the Secretariat completed the selection of the Fellowship Officials for 2022. Including the Fellowship Officials who have postponed their term to 2022, five (5) Fellowship Officials each selected from Bhutan, Kazakhstan, Myanmar, Thailand, and Timor-Leste for the 1st half batch, and three (3) Fellowship Officials each selected from Brunei Darussalam, Indonesia, and Mongolia for the 2nd half batch will be working at the Secretariat in 2022.

Points for consideration

22. The Assembly may wish to
- take note of the updates
- consider and endorse the establishment of an Organizing Committee for High-Level Workshop on Forest-related Disaster Management and Impacts of Climate Change in 2022.

Annex-1

Status of Training and Education Programs in 2021

(As of 15 September 2021)

No.	Date/Venue	Courses	Number of Trainees* (Male/Female)	Number of Countries*
AFoCO Regular Training (short-term)				
1	22-26 Mar./ Virtual	Project Development & Project Proposal Writing	38 (19/19)	10
2	3-7 May/ Virtual	Forest-based Climate Change Adaptation and Practices	44 (19/25)	12
3	23-24 Jun./Virtual	Project Management and Performance Review	*Conducted by the Secretariat (Cooperation and Project Division) as part of the Annual Technical Workshop*	
4	23-24 Jun./Virtual	LPA Sub-regional project development		
5	31 May-4 Jun./ Virtual	Community-based Forest Enterprise Development	50 (22/28)	11
6	19-23 Jul./ Virtual	Payments for Ecosystem Services: how PES serves as a new financial instrument in UN Decade on Ecosystem Restoration 2021–2030	60 (30/30)	14
7	1-5 Nov./Virtual	Forest Fire Management Information System	To be updated	To be updated
8	-	(High-level) Forest-related Disaster Management and Impacts of Climate Change	To be organized in 2022	
AFoCO Regular Training (long-term)				
9	October	Capacity building for RETC staff on hospitality & service management and English conversations	16 (10/6)	1
Community Development Training				
10	October	(Cambodia) Community Livelihood Improvement through Seedlings Production	To be updated	To be updated
11	November	(Philippines) Bamboo Product Development and Marketing***	To be updated	To be updated
12	December	(Viet Nam) Enhancing community capacity in forest plantation under FSC standards in Bac Quang district, Ha Giang province	To be updated	To be updated
13	December	(Myanmar) Community-based forest fire and water resources management****	To be updated	To be updated
14	-	Eco-Schools for Teachers in Myanmar	*Canceled due to COVID-19*	
15	-	Eco-Schools for Students in Myanmar		
Workshop				
16	-	International Workshop on the Establishment of AFoCO Experimental Forest	To be organized in 2022	
Customized Training & Capacity Building Workshop with Partners				
17	30 Aug.-3 Sep./Virtual	AFoCO-ITTO Capacity Building Workshop on Forest Landscape Restoration in Asia-Pacific Region	72** (39/33)	15**

Notes:
* Numbers and countries of trainers and facilitators are not included.
** Eight Participants of Fiji (2), India (2), Turkmenistan (2), and Tajikistan (2) are included.
*** A carried-over training program from 2020.
**** An alternative training course targeting young forest firefighters.

Annex-2

AFoCO RETC Trainees of the Member Countries
(2019 ~ 2020, 5-day Short-term Training, Face-to-face)

Country	Number of Certified Trainees*												Total
	2019								2020				
	FRFS	PDPW	FPNP	FFM	SUBLI	ARD	CBE	**Sub total**	CFFM	PDPW	RCP	**Sub total**	
Bhutan	2	2	2	2	2	2	2	**14**	2	-	-	**2**	16
Brunei Darussalam	-	-	2	2	-	2	-	**6**	-	2	-	**2**	8
Cambodia	2	2	2	2	2	1	2	**13**	2	2	2	**6**	19
Indonesia	2	2	2	2	2	2	2	**14**	2	2	4	**8**	22
Kazakhstan	2	2	-	2	2	-	-	**8**	-	-	-	**-**	8
Lao PDR	2	2	2	0	2	0	2	**10**	2	2	2	**6**	16
Malaysia	-	-	-	-	-	-	-	**-**	-	-	-	**-**	0
Mongolia	-	2	-	2	2	-	-	**6**	2	2	-	**4**	10
Myanmar	4	4	2	2	4	2	6	**24**	2	4	4	**10**	34
Philippines	2	2	2	-	2	-	-	**8**	-	-	2	**2**	10
Singapore	-	-	-	2	-	-	-	**2**	2	-	-	**2**	4
Thailand	2	2	2	4	2	1	2	**15**	4	2	2	**8**	23
Timor-Leste	2	2	2	-	-	2	2	**10**	2	2	2	**6**	16
Viet Nam	2	2	2	2	2	2	2	**14**	2	2	4	**8**	22
Total	22	24	20	22	22	14	20	**144**	22	20	22	**64**	208

Notes:
*Number of speakers, facilitators, and other countries' participants are not included.

Abbreviations:
FRFS: Forest Restoration and Food Security in Korea
PDPW: Project Development and Proposal Writing
FPNP: Workshop for Policy Makers on Beyond Planting Trees: Forest Pathways to No Poverty and Zero Hunger
FFM: Forest Fire Management
SUBLI: Sustainable Use of Biodiversity for Livelihood Improvements
ARD: Accelerating projects through Resource Diversification (High-Level)
CBE: Facilitating Community-based Enterprises
CFFM: Community-based Forest Fire Management
RCP: Reforestation and Community Participation

Annex-3

AFoCO RETC Trainees of the Member Countries
(January-September 2021, 5-day Short-term Training, Virtual)

Country	Number of Certified Trainees*					Total
	PDPW	FBCCA	CBFED	PES	FLR	
Bhutan	2	2	2	3	2	11
Brunei Darussalam	-	2	-	3	-	5
Cambodia	2	2	2	3	13	22
Indonesia	13	8	20	12	13	66
Kazakhstan	2	5	2	2	2	13
Lao PDR	-	-	2	5	2	9
Malaysia	-	-	-	2	4	6
Mongolia	2	2	2	3	-	9
Myanmar	4	2	2	2	4	14
Philippines	6	7	8	13	9	43
Singapore	-	2		3	-	5
Thailand	2	2	2	4	6	16
Timor-Leste	3	8	6	3	5	25
Viet Nam	2	2	2	2	4	12
Total	38	44	50	60	64	256

Notes:
*Number of speakers, facilitators, and other countries' participants are not included.

Abbreviations (in alphabetical order):

CBFED:	Community-based Forest Enterprise Development
FBCCA	Forest-based Climate Change Adaptation
FLR:	Forest Landscape Restoration
PDPW:	Project Development and Proposal Writing
PES	Payments for Ecosystem Services

Annex-4

AFoCO POLICY BRIEF

Forest-based Climate Change Adaptation: Lessons Learned and Way Forward

BACKGROUND

The rapidly warming climate is the single biggest existential challenge to the global community today. Its manifestations are many and include rising temperatures, changing rainfall patterns, prolonged dry seasons, and periods of intense precipitation. Frequent extreme weather events bring in their wake natural disasters like droughts, cyclones and floods, and landslides in mountainous regions. The impacts vary from region to region and, within regions, across ecological systems. Asia, with its spread from the equator to the north pole, longest and highest mountain ranges, a number of large water bodies and deserts, forests of all descriptions, and the dense human population largely dependent on rain-fed agriculture, is one of the most vulnerable regions to the Climate Change (CC).

As agreed under the UNFCCC, all countries are expected to mainstream climate change mitigation and adaptation measures into the country's policy responses. Mitigation is defined as an intervention to reduce greenhouse gas emission sources, while adaptation is actions that are taken to anticipate the adverse effects of CC and take relevant and useful measures to avoid or lessen the impacts they can cause and take advantage of opportunities to change may offer.

Forest restoration activities over degraded and deforested lands result in sequestering atmospheric carbon dioxide and thereby causes mitigation. Sustainable forest management that limits harvesting to within the annual increment and provides wood that replaces petrochemicals, metals, and cement with high carbon footprints leads to mitigation of climate change that can be sustained over generations. Reducing emissions from deforestation and forest degradation is one of the more important climate change mitigation measures that has found favor in many developing countries and is actively being promoted through Climate Finance.

FOREST-BASED CLIMATE CHANGE ADAPTATION

Even with the best mitigations efforts, a certain degree of climate change is unavoidable, and it is critical to adapt to it. There are two main components under the forest-based Climate Change Adaptation (FBCCA) that could be conveniently termed "adaptation for forest" and "forest for adaptation." The former refers to reducing the vulnerability of forest ecosystems to the impacts of climate change such as forest fires, outbreaks of forest insects and pests, an infestation of invasive species, loss of biodiversity, and soil and moisture losses in the forests, while the latter refers to reducing the vulnerabilities of forest-dependent communities arising out of the impacts of climate change on the forests. Both aspects of adaptation need a sound Sustainable Forest Management (SFM) containing the core elements as follows[1]:

- Ensure forest diversity, health, and vitality are not adversely affected.
- Accelerate rehabilitation and forest restoration.
- Minimize forest fragmentation and enhance landscape consolidation.
- Adopt integrated forest fire management practices emphasizing preventive measures.
- Establish a sound pest and disease and invasive species management system.
- Adopt the principles of reduced-impact logging in all harvestings.
- Make proper and generally native choices of species for raising plantations.

Box 1. Key Messages

- FBCCA leads to reduced vulnerabilities of forest ecosystems while also reducing the vulnerabilities of forest dependent communities arising out of the impacts of climate change on the forests.
- Mitigation measures overshadow adaptation in the forestry sector as raising money is more difficult for adaptation projects.
- The implementation of FBCCA is hampered by continuing deforestation and degradation of forests across the developing world.
- Lack of cross-sectoral integration between the forestry and other relevant sectors is limiting adaptation to climate change in forests.

NATIONAL ADAPTATION PLANs (NAPs)

National Adaptation Plan (NAP), developed under the Cancun Adaptation Framework (CAF), is the formulation of adaptation

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initiatives at the country level to reduce vulnerability and promote resilience in each identified priority sector exposed to CC. The NAP offers project-based solutions to the countries' adaptation needs identified both in the medium and long term. The status of the NAP in AFoCO Member Countries is shown in **Table-1**. Analytical approaches to the forests and forestry sector in the NAPs are required.

Table-1: Status of Nation Adaptation Plans (NAPs) in AFoCO Member Countries

Status	Countries
Implementation	Mongolia, Republic of Korea, Timor-Leste, and Viet Nam
Adopted	Indonesia and Myanmar
Preparation	Bhutan, Cambodia, Kazakhstan, Lao PDR, Philippines, and Thailand
No NAPs/other adaptation approaches	Brunei Darussalam and Singapore
**Countries that endorsed the National Adaptation Programme of Action (NAPAs)*	*Bhutan, Cambodia, Lao PDR, Myanmar, and Timor-Leste*

POLICY HIGHLIGHTS ON FBCCA IN AFoCO REGION

The problem statements of each country on the implementation of FBCCA were discussed in detail during the training. The core problem at the regional level was raised as '**Lack of techniques and financial support to develop the FBCCA practices,**' under which three interventions were highlighted as the major causes to be addressed (**Figure-1**).

Mitigation overshadows the adaptation.

All the Member Countries have either adopted the NAP/NAPA or adaptation-related policies or are in the process of doing so. Although adaptation projects/activities on forest sectors are often included in these adaptation strategies, successful case studies have rarely been recorded. As the training participants shared a common understanding, the forestry sector is still considered in "a piecemeal manner" in most national and sub-national adaptation strategies[1], and no attention has been paid to the development of sound adaptation methodologies in the forest sector[2]. As a result, forest-based adaptation is still predominated by forest-based mitigation with adaptation as a subsidiary benefit.

Improper/adaptation-free land use planning accelerates deforestation and hinders FBCCA at the national level.

Appropriate use of lands in human settlements is recognized as important by all societies. Still, as land values increase over time, deviations from norms occur in many places, the commonest of which is the expansion of agriculture and habitation into neighboring forest lands, causing deforestation and degradation, which makes both forests and communities more vulnerable to the impacts of the changing climate. During the training, the underlying causes were identified by trainees from AFoCO Member Countries, and it was suggested that inter-sectoral coordination is essential for reducing improper and adaptation-free land use and thereby strengthening adaptation to CC. For instance, at the local level, integrated farming practices and landscape approaches could be applied to reduce the agricultural expansion into the forests, leading to loss of forest area and carbon sinks. At the same time, sustainable financing mechanisms, technical know-how, and expertise are still needed to address improper land use at the national level.

Deforestation and forest degradation still exist as a rising issue.

Deforestation and forest degradation releasing carbon dioxide and methane into the atmosphere is a leading cause of CC. It exists as an immense challenge in most developing countries where the livelihood of a large section of people depends on the forests and land-based activities. Excessive extraction of firewood and illegal trade in timber are major causes of forest degradation across the developing world. Forest fires during prolonged dry seasons and extreme heat caused by the changing climate, and mining without effective implementation and monitoring measures are other major causes of deforestation across the developing world.

WAY FORWARD

Forest-based Climate Change Adaptation (FBCCA) leads to reduced vulnerability of forest ecosystems to the impacts of climate change, such as: forest fires, outbreaks of forest insects and pests, an infestation of invasive species, loss of biodiversity, and soil and moisture losses in the forests while also reducing the vulnerabilities of forest-dependent communities arising out of the impacts of climate change on the forests.

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To strengthen the effective implementation of FBCCA, the following recommendations are made to the AFoCO Member Countries:

1. Mainstream adaptation actions into the mitigation projects/programs and made adequate funding available.
2. Acknowledge FBCCA as a part of SFM and accelerate its implementation.
3. Develop awareness among stakeholders about FBCCA as nature-based solutions to the problems caused by climate change.
4. Strengthen the inter-sectoral networking and coordination between the forestry sector and other relevant sectors/organizations to implement FBCCA tangible.

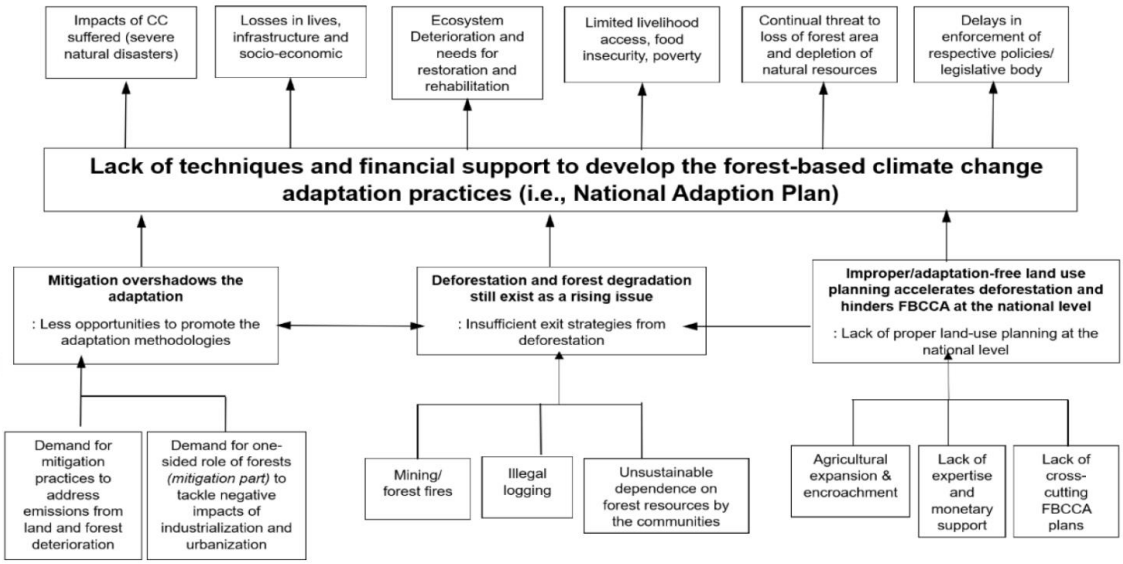
REFERENCES

[1] RECOFTC; FAO; UNEP. 2012. Forest and Climate Change Adaptation in Asia. Available at: https://www.recoftc.org/publications/0000048?t%5B0%5D=93&t%5B1%5D= 82&page=1&p=browse

[2] Locatelli, B., M. Kanninen, M. Brockhaus, C.J.P. Colfer, D. Murdiyarso, H. Santoso. 2008. Facing an uncertain future: How forests and people can adapt to climate change. Forest Perspectives No. 5. Center for International Forestry Research (CIFOR), Bogor. Available at: www.cifor.org/publications/pdf_files/Books/BLocatelli0801.pdf

Box 2. Training Summary

- The training course entitled 'Forest-based Climate Change Adaptation and Practices' was virtually organized from May 3 to 7, 2021, and welcomed a total of 44 participants from 12 AFoCO Member Countries: Bhutan, Brunei Darussalam, Cambodia, Indonesia, Kazakhstan, Mongolia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Viet Nam.
- Ten valuable lectures were contributed by the lecturers from various organizations including AFoCO Secretariat, Chiang Mai University, CIFOR, Kasetsart University, ITTO, and The Oscar M. Lopez Center of the Philippines.
- The course aimed to:
  - provide participants with in-depth knowledge of the policies and regulatory frameworks for developing and managing climate change adaptation strategies;
  - share practical cases and experiences of Member Countries; and
  - discuss opportunities and challenges and establish possible recommendations reflecting from the lessons learned.



(Source: Interventions from 12 Member Countries at the AFoCO Short-Term Training Course on Forest-based Climate Change Adaptation and Practices, 3-7 May 2021)

Figure-1: Problem Tree on FBCCA in the AFoCO Region

Community-Based Forest Enterprise Development: Discovering Its Status and Significant Obstacles

BACKGROUND

Most of the forests were historically managed by the state or government forest institutions in their centralized management system. Consequently, the uses and production of the forest resources were subject to the Government's stringent policy and top-down decision in conventional ways. Since the late 1970s, however, the participation of the local communities in forest management has been emphasized in the South or Southeast Asian Countries to decentralize forest management[1]. As a result, decentralized forest management regime in various forms of community forestry, social forestry, participatory forest management, village forestry, and joint forest management has emerged after political, legal and institutional reforms in most countries.

Community Forestry (CF) is defined in various ways based on each country's legislative framework and context. It encompasses all initiatives and activities for sustainable forest management with the participation of local communities in which a significant range of use, access, and management rights has been granted to those local communities. As a result, CF can fulfill the local communities' subsistence needs and have the potential to establish community-based forest enterprises that can generate economic value, increase social welfare, and ensure rural development.

COMMUNITY-BASED FOREST ENTERPRISES

Community-based Forest Enterprise (CBFE), also known as Community Forest Enterprise (CFE), refers to community-led forest products commercialization, nature-based tourism, or carbon-trade. The individuals or community and/or cooperatives undertake extraction, processing, adding value, and making marketable of forest resources.

In order to activate the CBFE sustainably, community-based forest management is adopted as a win-win approach for enhancing forest conservation while improving the livelihoods of the local people. Particularly, the following key components should be incorporated into its management regime for further progress of the CBFE:

- Enabling legislative framework
- Clear and secure tenure and management rights
- Effective governance and strong communities' commitment
- Practical technology and access to financial sources
- Knowledge of market information and access to the market channel
- The capacity of the communities and engagement of the relevant stakeholders by accommodating their interests
- Sufficient availability of the forest resources, e.g., raw materials.

Box 1. Key Messages

- CBFE increase the local communities' economic potential, improve the social welfare and contribute to rural development.
- The supportive and facilitative legal provisions ensuring secure forest tenure, simple and clear procedures are fundamental for proper implementation and progress of CBFE.
- The proper cooperation and coordination among the government, local communities and other relevant stakeholders can fulfil the existing gaps of communities' business operational needs.

STATUS OF CBFED IN AFoCO MEMBER COUNTRIES

The level of CBFED stages of the member countries is diverse, from subsistence to operational stage (**Table-1**). The main criteria to categorize the 'CBFE operational stage' is whether the country endorses the legal and regulatory frameworks for CBFED at the national level. Of the eleven countries, Bhutan, Cambodia, Indonesia, Philippines, and Viet Nam are currently functionalizing the CBFE development utilizing various forest resources from raw materials to fine products, including ecosystem services.

Table-1: Level of CBFED stages in 11 AFoCO Member Countries

Stage	Countries
In the operational stage at the national level *(e.g., raw materials, fine products, nature-based tourism, and ecosystem services)*	Bhutan[2], Cambodia[3], Indonesia[4,5,6], Philippines[7,8], and Viet Nam[9,10,11,12]
In the transition from subsistence to CBFE operation *(e.g., mostly raw materials)*	Lao PDR[13,14,15] and Myanmar[13,16]

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Advanced concept of CF but still in subsistence stage requiring a supportive regulatory framework for CBFED	Thailand[17]
Subsistence stage requiring a supportive regulatory framework for CBFED	Kazakhstan, Mongolia, and Timor-Leste

POLICY HIGHLIGHTS ON CBFED IN AFoCO REGION

The overall significant obstacles hindering CBFED from reaching subsistence to the mature stage have been identified among the discussion of the participated member countries during the five-day training course. Based on the baseline information from the country report and the intervention from the participants, the problem tree in the AFoCO region is identified. The core problem at the regional level was raised as **'Low impetus in the progress and development of qualified CBFEs,'** under which three challenges were highlighted as the major causes to be addressed (**Figure-1**).

Funding sources are still limited and insecure.

One of the common issues hindering the CBFED in most member countries is the limited funding sources. The fact is due to the unsustainable financial supports from the project based CBFE interventions. Additionally, the enabling legislative framework with a lack of incentive mechanism would not attract the private sector for their investment and engagement. This might also be due to their low trust in the tenure security and unclear commercial use rights on forest products.

The said issue would be addressed by supportive and facilitative legal provisions, which eventually ensure secure forest tenure, clear and simple procedures on taxation system, and functioning for harvesting, processing, marketing, and transportation of the forest products.

Likewise, the Government's legal instruments and related policies should include the incentive mechanism for the private sector engagement to attract their interests and investment in CBFED. Thus, a viable business environment would be developed where the generating outputs can be shared with the private organizations while the needs of local communities' business capacity can be fulfilled.

Products from CBFE have low competition in the market.

Another challenge for CBFED is the limited skill, technical know-how, and capacity of the local communities to manufacture qualified products. As a result, the semi-finished or raw materials are being sold with low competitiveness in the market. Therefore, vocational training on appropriate technology and business skill should be strategically organized for the local communities with the support and collaboration of the Government, private sectors, and other relevant organizations.

Moreover, the limited access to market information makes them heavily reliant on the middlemen who can monopolize the network. In this context, the establishment of the community-based information system would be one of the solutions to minimize this gap, wherein the collective information enables communities get more direct market accesses. Much more research on value-change and market analysis is critical to be embedded in the system and network so that the communities can share the value-added on-site information.

Communities' weak participation should be enhanced.

Communities' interest and their commitment is the primary factor for the sustainable development of CBFE. Their active participation can come out from much more capacity-building activities that should be conducted to provide the local communities with the fundamental knowledge and skills on forest management and business development. The local people and the capacity of the forestry staff should be promoted to make them active and supportive facilitators in implementing CBFE.

Illegal logging practices are still doable income generating sources to communities.

Illegal logging and trade of flora and fauna are the primary causes of deforestation in most developing countries. The local people are often involved in that activity due to the limited livelihood options and the illegal market, particularly across the border. In this regard, the Government's law enforcement and anti-corruption measures are compulsory for taking actions against illegal logging and other causes of deforestation in effective and efficient ways. The local people's awareness and participation in the CBFE is another solution to reduce deforestation and increase conservation with their engagement and commitment to forest management.

WAY FORWARD

The viability of CBFE can be efficiently strengthened when the relevant stakeholders, including local communities, Government, and private sector, are effectively engaged and mobilized[18] and when legislations are supportive and facilitative enough. Under such circumstances, CBFE can create a win-win situation while increasing the socio-economic development of the local

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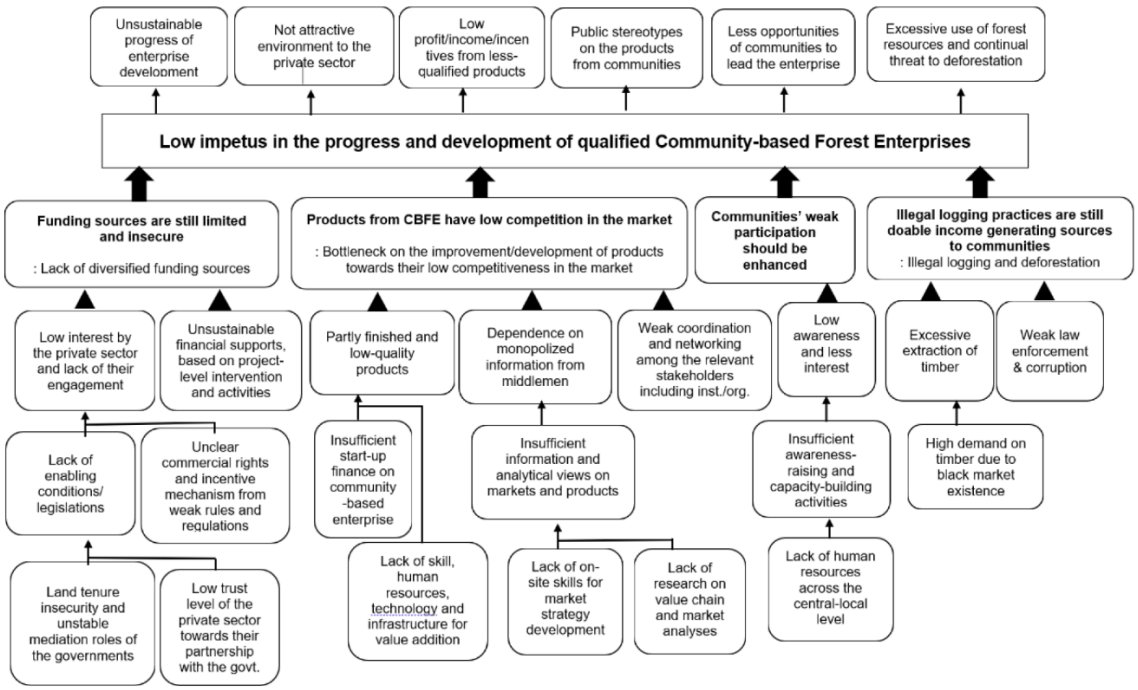
communities, ensuring the return of profit for the private sector, and promoting the sustainable forest management that the Government seeks.

To achieve the goal of CBFED for AFoCO Member Countries, the following interventions are recommended to minimize the existing gaps and make CBFE progress efficiently and sustainably:

1. Activate the dialogues or discussions among the relevant stakeholders to enhance CBFED knowledge, opportunity, and potential and find the proper solutions for its growth and progress.
2. Develop innovative partnerships of public-private partnership or buyer-supplier cooperation to create a long-term win-win business environment.
3. Enhance cooperation and coordination between the Government and other relevant institutions/ organizations to make the CBFE procedures smooth and easy to undertake.
4. Strengthen the business skill of the local community via capacity-building programs with the support of the Government and other relevant organizations.
5. Build good governance, sound transparency, equitable benefit sharing in the internal CF body to strengthen their management regime in the long run.

Box 2. Training Summary

- The training course entitled 'Community-based Forest Enterprise Development' was virtually organized from May 31 to 4 June, 2021, and welcomed 50 participants from 11 AFoCO Member Countries: Bhutan, Cambodia, Indonesia, Kazakhstan, Lao PDR, Mongolia, Myanmar, Philippines, Thailand, Timor-Leste, and Viet Nam.
- A total of eight sessions were fruitfully contributed by the trainers of AFoCO RETC and RECOFTC, with various case studies by Biodiversity Management Bureau of the DENR, Philippines, Sosial Bisnis Indonesia (SOBI), FOREST1983 of the ROK, and Taking Root/EnRacine.
- The course aimed to:
  - provide in-depth knowledge of the policies and practical strategies for planning and encouraging CBFED in the forestry sector;
  - explore risks and enabling conditions for sustainable CBFED initiatives; and
  - learn the practical and sustainable solutions by sharing practical cases and experiences of the Asian region.



(Source: Interventions from 11 Member Countries at the AFoCO Short-Term Training Course on Community-based Forest Enterprise Development, 30 May-4 June 2021)

Figure 1. Problem Tree on the CBFED in the AFoCO's Region

Payments for Ecosystem Services: Opportunities and Challenges in AFoCO Member Countries

BACKGROUND

A healthy ecosystem provides the society's diversified benefits, including provisioning services such as the supply of food, water, productive soil, and timber; the regulatory services on the climate and air quality; and other cultural and supporting services. To value those ecosystem services, a market-based incentive system called Payments for Ecosystem Services (PES) offered the farmers or landowners the way of income generation in exchange for managing their land to provide some ecological services for society or end-users.

Under the Sendai Resilience Framework, PES is considered as one of the nature-based solutions in an integrated manner of contributing to disaster risk reduction and climate change adaptation with socio-economic benefits. "UN Decade on Ecosystem Restoration 2021-2030" declared by the UN General Assembly in 2019 highlighted the value of the PES as one of the new financial instruments. At the 25th Session of the FAO Committee of Forestry in 2020, PES was emphasized as one of the innovative financing modalities to increase restoration and conservation of forest resources, ensure sustainable use, and address deforestation.

In this passionate call to action, the immediate efforts to speed up the restoration of degraded ecosystems had been significant to combat the global warming problem, improve food security, provide clean water, and conserve the planet's biodiversity.

PES READINESS IN 2021

To fulfill the knowledge and share the experiences on the PES application as a successive opportunity from PES workshop in 2014, "How PES serves Livelihood of Forest Community in the Southeast Asia Region," a five-day intensive virtual training was organized by AFoCO during July 19-23 in 2021. The PES training in 2021 is also a new arena for further clarification and examination before planning a PES programme and initiative at the regional level.

Box 1. Key Messages

- PES increase the ecosystem resilience, contribute the sustainable forest management, and improve the wellbeing of the landowners or local community.
- The nationwide application of PES is hampered by the limited policy advocacy and high-level commitment.
- Long term and sustainable PES development are frustrated with the lack of the private sector engagement, limited financial supports and inadequate administrative and institutional capacity.

A summary of country readiness to PES in 2021 is shown in **Table-1**. Five of the 15 Member Countries have a relatively stable and balanced environment for advancing the PES mechanism (i.e., Bhutan, ROK, Mongolia, Philippines, and Viet Nam), while three are ready to implement the PES activities at a nationwide scale (i.e., Indonesia, Lao PDR, and Thailand). The remaining eight countries still require PES enabling conditions considering respective readiness stages (i.e., Brunei Darussalam, Cambodia, Kazakhstan, Malaysia, Myanmar, Singapore, and Timor-Leste). Yet, during the workshop, the majority of the participant countries shared a common view that PES in their countries was limitedly or not implemented at a nationwide level, with unclear PES definition or concept, absence of national PES development guideline, and lack of national experts.

Table 1. PES Readiness in 2021

CATEGORY	BT	BN	KH	ID	KZ	LA	MY	MN	MM	PH	ROK	SG	TH	TL	VN
1. Valuation Study	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
2. Pilot Project and Outcomes	Y	N	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	N	Y
3. Policy Advocacy and Awareness Raising	Y	N	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y
4. Stakeholder Consultation	Y	N	Y	Y	N	Y	N	Y	N	Y	Y	Y	Y	N	Y
5. Enabling Legal Framework	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
6. Nationwide Implementation	Y	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	Y

(Source: Country reports from the Member Countries at the AFoCO Short-Term Training Course on Payments for Ecosystem Services, July 19-23, 2021, including the information of the ROK from the source of the PES workshop in 2014)

Y=Yes; N= No / BT= Bhutan; BN= Brunei Darussalam; KH=Cambodia; ID=Indonesia; KZ= Kazakhstan; ROK= Republic of Korea; LA= Lao PDR; MY= Malaysia; MN= Mongolia; MM= Myanmar; PH=Philippines; SG= Singapore; TH= Thailand; TL= Timor-Leste; VN= Viet Nam

POLICY HIGHLIGHTS ON PES IN AFoCO REGION

According to the PES Readiness in 2021, the concept of PES is recognized as a new financial mechanism to compensate for the ecosystem deterioration as well as increase the social well-fare of the environmental services (ES) providers, especially the participating farmers and communities.

However, the nationwide application of PES is still limited in most Member Countries facing a vast of challenges in terms of technical expertise, financial, awareness, legal framework, and high-level commitment. Likewise, the core problem at the regional level was raised as **'Unstable financing mechanism for sustainable PES without technical backing'** under which three challenges were highlighted as the major causes to be addressed (**Figure-1**).

Unclear market-based approaches have resulted in undervalued PES.

PES scheme has been reported to provide direct and significant financial, ecological and socio-economic benefits to the participating communities in countries where PES is mainstreamed into the national policy. Their financial source or demand comes from government funds, private sectors, or international and bilateral agencies.

However, many PES initiatives in countries without clear guidelines and/or strong legal and institutional supports are still struggling and unsustainable without regular and strong external supports. As a result, despite the benefits of ecosystem services are significantly recognized, their economic values are underestimated due to the lack of a well-defined market scheme, payment mechanism, and clear benefit-sharing for PES.

Lack of public awareness often hampers PES implementation.

One of the key elements in the deficient environment for PES includes the lack of community awareness and their limited organizational capacity. Most Member Countries highlighted that the PES concept is not widely aware among the stakeholders, and high-level commitment is still lacking.

Moreover, local people who are potential ES providers have limited knowledge of the important role of ES. They don't have an adequate understanding of ecosystem services, especially what is being sold, where to sell, and its long-term implications for local livelihoods and resource rights. Besides, the communities are still lacking the technical capacity and proper organizational management to initiate PES.

Additionally, the lack of intermediaries who can negotiate between the providers and beneficiaries is often another hurdle. Also, lack of attention and appropriate government support plays a part in hampering PES development and its nationwide implementation.

The institutional arrangement at the National Level is still missing.

Strong legal and political supports, a good governance system, and proper institutional capacities are the prerequisites for a successful PES scheme[1]. However, the case studies and experiences from the participating Member Countries indicated that the lack of consideration on PES policy and mainstreaming into the existing legal framework is one of the key challenges to be addressed for scaling up PES initiatives.

Mainstreaming the PES scheme into the national priority remains a huge gap although most Member Countries have the enabling legal framework to support starting up PES. Rather vast amount of government's budget spent on the reforestation activities, supportive measures on PES activities and assessment are still inefficient. Moreover, the institutions, including the local community, government bodies, and intermediary societies, are not well equipped with sufficient administrative and technical capacity to manage and sell the ecosystem services.

Thus, the legal framework should have efficient and clear guidelines to initiate the PES scheme between the ES providers and beneficiaries. It should also include the incentive mechanism to attract the private sector for their supports and engagement. The role of the government also plays an important part not only in their advocacy and commitment but also in providing the financial support to do the necessary PES assessment. PES schemes also require the substantial administrative and institutional capacities of the relevant stakeholders to undertake PES initiatives.

WAY FORWARD

The PES scheme would be a viable financial mechanism with strong political support, effective governance systems, adequate administrative and institutional capacity. The viable PES scheme has tremendous contribution to sustainable forest management, ecosystem resilience, and improvement of the social welfare

AFoCO RETC

of ES providers, particularly the landowners or local community.

Finally, the following interventions are recommended for AFoCO Member Countries to achieve such sustainable and successful PES initiatives in the long run:

1. Mainstream PES in the national planning and financial decision making for its political advocacy and high-level commitment.
2. Build trust, dialogue, and commitment among the stakeholders and let them involve in decision making (e.g., Free, Prior, Inform, Consent (FPIC) is considered as a useful framework)[2].
3. Promote the local community interest and their active participation through all-inclusive policies framed by equitable stewardship and benefit-sharing[1].
4. Strengthen the necessary capacities of the institutions to enable them in establishing the PES scheme.
5. Develop the information-sharing platform and lessons learning on the national/ regional or global successful PES stories.

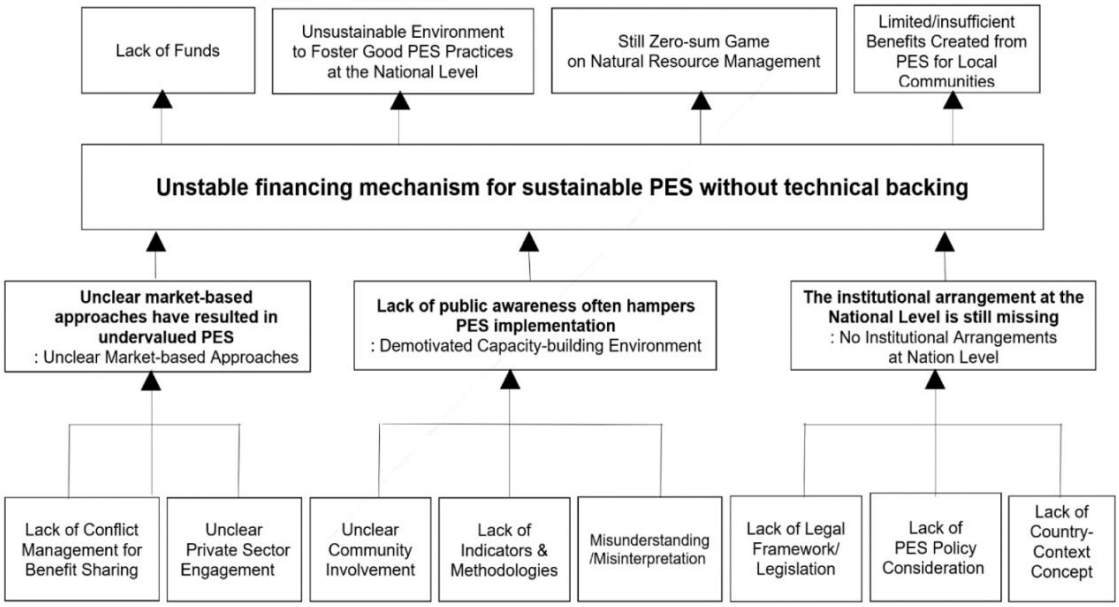
Box 2. Training Summary

- This training course was virtually organized from July 19-23, 2021, and joined by a total of 60 participants from 14 AFoCO Member Countries: Bhutan, Brunei Darussalam, Cambodia, Indonesia, Kazakhstan, Lao PDR, Malaysia, Mongolia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Viet Nam.
- Eight lectures and case studies were fruitfully contributed by the lecturers from various organizations including AFoCO Secretariat, CIFOR, National Institute of Forest Science of the ROK, Department of Forest and Park Services in Bhutan, Multilateral Cooperation at the Bureau of International Cooperation, Ministry of Environment and Forestry, Republic of Indonesia, Royal Forest Department of Thailand, and Viet Nam Forest Protection and Development Fund.
- The course aimed to:
  - provide the comprehensive understanding of PES for practical strategies in planning and projects/programs;
  - explore risks and challenges for the progress of PES; and
  - find the practical and sustainable solutions by sharing cases and experiences of the Asian region.

REFERENCES

1 FAO. 2014. Payment for ecosystem services for forests (PES) and forest financing. Committee on Forestry (COF) Twenty-Second Session Meeting Document, 23–27 June 2014. FAO, Rome, Italy. Viewed at: http://www.fao.org/3/a-mk166e.pdf.

2 Fripp E. 2014. Payments for Ecosystem Services (PES): A practical guide to assessing the feasibility of PES projects. Bogor, Indonesia: CIFOR.



(Source: Interventions from 14 Member Countries at the AFoCO Short-Term Training Course on Payments for Ecosystem Services, July 19-23 ,2021)

Figure 1. Problem Tree on PES in the AFoCO Regional Level

Forest Landscape Restoration in the Asia-Pacific Region: Promoting inclusive and integrated community based FLR Interventions in support of the UN Decade on Ecosystem Restoration 2021-2030

BACKGROUND

The UN Decade on Ecosystem Restoration (2021-2030), adopted by the United Nations General Assembly in March 2019, brings the much-needed urgency to the worldwide need for the restoration of degraded forests. In the tropics alone, more than 9 million hectares of forests are degraded, threatening the livelihoods and sometimes the lives of millions of forest-dependent people. Degraded forests must be restored urgently to maintain their resilience to climate change and enable them to continue providing their multiple benefits to those who live in and around them. Making significant progress in restoration during this Decade is now a global challenge.

In support of the achievement of the UN Decade on Ecosystem Restoration, **AFoCO-ITTO Capacity Building Workshop on Forest Landscape Restoration (FLR) in the Asia-Pacific Region** was organized by the AFoCO and ITTO and conducted on virtual platform from 30 August to 3 September 2021.. A total of 72 participants from 15 countries, including Bhutan, Cambodia, Fiji, India, Indonesia, Kazakhstan, Lao PDR, Malaysia, Myanmar, Philippines, Tajikistan, Thailand, Timor-Leste, Turkmenistan, and Viet Nam took an active part in this intense five-day workshop.

The workshop was intended to enhance the capacities of FLR policy makers and planners in AFoCO and ITTO member countries in the Asia-pacific region, and two invited countries from the Central Asian region, Tajikistan and Turkmenistan, to undertake successful FLR interventions. . Specifically, the workshop aimed at providing participants with a comprehensive understanding of the six FLR principles and associated guiding elements that form the foundation of the new ITTO Guidelines on Forest Landscape Restoration in the Tropics. The workshop also aimed at promoting the effective participation of local communities and smallholders in community-based restoration activities while ensuring sustainable livelihoods.

To achieve this objective, four keynote talks and six lectures by well-known experts in the field were arranged from various organizations, including AFoCO, Asian Institute of Technology (AIT), Bern University of Applied Sciences, Switzerland, The Center for International Forestry Research - World Agroforestry (CIFOR-ICRAF), Green Climate Fund (GCF), International Union of Forest Research Organizations (IUFRO), International Union for Conservation of Nature (IUCN), and The Center for People and Forests (RECOFTC). Each session was followed by detailed discussions in which almost all participants took a very active part.

Box-1. Six Principles of FLR

- Principle 1: Focus on landscapes
- Principle 2: Engage stakeholders and support participatory governance
- Principle 3: Restore multiple functions for multiple benefits
- Principle 4: Maintain and enhance natural forest ecosystems within landscapes
- Principle 5: Tailor to the local context using a variety of approaches
- Principle 6: Manage adaptively for long-term resilience

(Source: ITTO Guidelines on Forest Landscape Restoration in the Tropics, 2020)

The workshop also provided an excellent opportunity to share national and local restoration cases and lessons and the challenges and opportunities it can present for local people and other stakeholders along the way. The restoration to be effective should be long-term and, therefore, must consider that stakeholders' priorities are likely to change over time as communities evolve in numbers, interrelations, skills, and aspirations. The nature and design of FLR interventions, while tailored to the conditions prevailing at the time of commencement, should be capable of adaptation to evolving circumstances.

KEY MESSAGES FROM THE WORKSHOP

This policy brief highlights key messages from intense discussions among the participants following keynote speeches and other talks by experts for developing and implementing FLR effectively at the country and regional levels.

1. ***FLR is much broader than raising forest plantations which constitute the main forestry-related activity in many countries.*** It focuses on restoring landscapes and takes into account the full range of interacting land uses, tenure, and governance arrangements. The aim is to restore multiple socioeconomic and environmental functions in landscapes and to generate a wide range of ecosystem goods and services that benefit all stakeholders equitably. FLR must not cause the loss or conversion of natural forests or other natural habitats. It involves adaptive approaches to creating resilient landscapes in the face of climate change.

2. ***Restoring forest landscapes, planting trees, and sustainably managing and protecting existing forests against degradation constitutes a cost-effective strategy for reaching the goals of the Paris Agreement, including carbon-neutral commitments of countries.*** It will also help the global community reach the Sustainable Development Goals and several other globally agreed policy instruments, including the United Nations Decade on Ecosystem Restoration (2021– 2030), as well as in deciding how we restore and manage our forest landscapes in a post-COVID 19 world. Fully restored forest landscapes are fundamental to low emissions and the climate-resilient development pathways of developing countries that are important for the development of a bio-based circular economy.

3. ***Creating sustainable livelihood opportunities for local communities and smallholders is crucial for the long-term sustainability of FLR projects.*** Forest restoration in degraded land takes a long time, but the local communities expect to get quicker returns. Therefore, it is important to analyze the value chains of products and services produced in restoring forest landscapes to ensure their economic viability. Livelihood diversification can be accelerated by integrating FLR activities into agroforestry, production of plants of medicinal value, non-wood forest products, protection of natural forests, and ecotourism. Understanding and accommodating the plurality of local aspirations is key to achieving restoration goals.

4. ***Promoting inclusive and integrated FLR interventions is essential to reverse land degradation, increase carbon storage, help conserve biodiversity and create sustainable livelihoods for local communities.*** Local people should feel secure about their rights for livelihood development from forest restoration interventions. Effective forest restoration requires contributions from stakeholders, including local communities and indigenous people, women, youth and marginal people, in decision-making.

5. ***The Guidelines for Forest Landscape Restoration in the Tropics help stakeholders***—from policymakers to foresters, community-based organizations, and farmers—in restoring degraded forest landscapes, thereby providing vital goods and services, creating sustainable rural livelihoods and employment, and supplying locally and globally important forest ecosystem benefits. The core principles of a landscape approach to FLR are addressing common concerns as (a) entry point activities; (b) continual learning and adaptive management; (c) multiple-scale; (d) multi-functionality; (e) multi-stakeholder; (f) negotiated and transparent change logic; (g) clarification of rights and responsibility; (h) participatory and user-friendly monitoring; (i) resilience; and (j) strengthened stakeholder capability.

6. ***The rules, procedures, and conditionalities for financing under various international mechanisms are in a continuous process of evolving,*** such as the UN Framework Convention on Climate Change, the UN Convention to Combat Desertification, the Convention on Biological Diversity, and UN-REDD. The GCF, and many other funding organizations, consider for financing only those proposals that are in line with the country's Nationally Determined Contributions (NDC) under the Paris Agreement, and this is an important reason for many project proposals not being approved by the financing agencies. There is a need to increase interaction between FLR practitioners and National Designated Authorities (NDAs) and Focal Points under these international agreements and mechanisms to enhance understanding of these evolving rules and procedures. This should be addressed immediately by institutionalizing regular interactions between them as a matter of government policy.

7. ***To increase the chances of success in obtaining co-financing for FLR projects, it is important to approach appropriate financing sources.*** Potential funding sources are identified as follows:

Working Document

- Activities that store carbon and increase resilience: GCF, Adaptation Fund;
- Activities that are part of government mandate: Public domestic finance;
- Activities that are transformative: bilateral, multilateral organizations like GCF;
- Activities that generate income: private finance;
- Activities that need short term finance: international public finance; and,
- Activities that need long-term financing: PES, carbon markets, private finance.

8. ***To increase the chances of success, FLR implementing agencies should prepare high-quality FLR project proposals.*** To this end, they should consider making use of the funding window of the GCF's Project Preparation Facility, which offers grants of USD 1 million per country per year for the development of proposals.

9. ***Methodologies are now available to identify priority landscapes for restoration and estimate the costs and benefits of different restoration strategies and opportunities,*** such as the Restoration Opportunities Assessment Methodology (ROAM). It is also possible to identify the extent and depth of degradation over vast areas of forests in the tropics using Google Earth Engine, an open-source platform capable of assessing land-cover changes at scale requiring minimal skills, and the source data are free of charge.

WAY FORWARD

There was tremendous response to this workshop generating intense discussions throughout the five days of its duration. There was a consensus among the participants, including those from the Central Asian region, that such workshops need to be organized at regular intervals so that more FLR policymakers and practitioners in these countries may benefit from it. Inorder to hasten the implementation of FLR to achieve the global targets in time, it would perhaps be best to hold at least four such workshops annually by the ITTO and AFoCO that should also cover the Central Asian region along with the Asia-Pacific region.

Only a limited number of FLR project proposals from the region have so far been successful in accessing finance from multilateral and bilateral international agencies and the private sector. The participants felt the need for capacity building of a larger number of FLR practitioners in the region in preparing good proposals for financing FLR projects for which one-day online workshops could be organized once every three months by the ITTO and AFoCO.

The participants showed deep interest in wanting to learn from successful FLR efforts in the region. The preparation of a number of case studies of good quality FLR interventions from across the region would help policy makers and implementers benefit from practical strategies that were developed in the face of specific circumstances of the cases.

Table 1. Forest losses and gains in fifteen countries of Asia and the Pacific

Country	Forest Area[2] (1000 ha)	Forest (% of land area)	Total land area[2] (1000 ha)	Population[3] (Million, 2000)	Annual Forest Change[1] (1000 ha/yr) 1990-2020	Annual Forest Change[1,2] (1000 ha/yr) 2015-2020
Bhutan	2,725	71.48	3,812	0.77	7.27 (0.29%)	2.00 (0.07%)
Cambodia	8,068	45.71	17,652	16.72	-97.90 (-0.89%)	-155.80 (-1.76%)
Fiji	1,140	62.39	1,827	0.89	6.67 (0.71%)	6.60 (0.60%)
India	72,160	24.27	297,319	1380	274.07 (0.43%)	266.40 (0.38%)
Indonesia	92,133	49.07	187,752	273.52	-880.40 (-0.74%)	-579.0 (0.61%)
Kazakhstan	3,455	1.28	269,970	18.78	9.77 (0.31%)	29.20 (0.88%)
Lao PDR	16,596	71.91	23,080	7.28	-41.57 (-0.23%)	-34.40 (-0.21%)
Malaysia	19,114	58.65	32,855	32.37	-50.17 (-0.24%)	-70.0 (-0.36%)
Myanmar	28,544	43.71	65,308	54.41	-355.83 (-0.91%)	-289.60 (-0.97%)
Philippines	7,189	24.11	29,817	109.58	-19.67 (-0.25%)	35.00 (0.50%)
Tajikistan	424	3.05	13,879	9.54	0.53 (0.13%)	0.40 (0.09%)
Turkmenistan	4,127	8.78	46,993	6.03	0.00 (0.00%)	0.00 (0.00%)
Thailand	19,873	38.9	51,089	69.8	17.07 (0.09%)	-37.60 (-0.19%)
Timor-Leste	921	61.94	1,487	1.32	-1.40 (-0.15%)	-1.40 (-0.15%)
Viet Nam	14,643	47.22	31,007	97.34	175.57 (1.87%)	116.20 (0.83%)

Source: [1] Food and Agriculture Organization of the United Nations (FAO). *Global Forest Resources Assessment 2020*. Main Report. FAO, Rome.
[2] FAO. *Global Forest Resources Assessment 2020.* Country Report. https://www.fao.org/forest-resources-assessment/fra-2020/country-reports/en/
[3] UN Data-https://data.un.org/en/index.html, Accessed October 2020.

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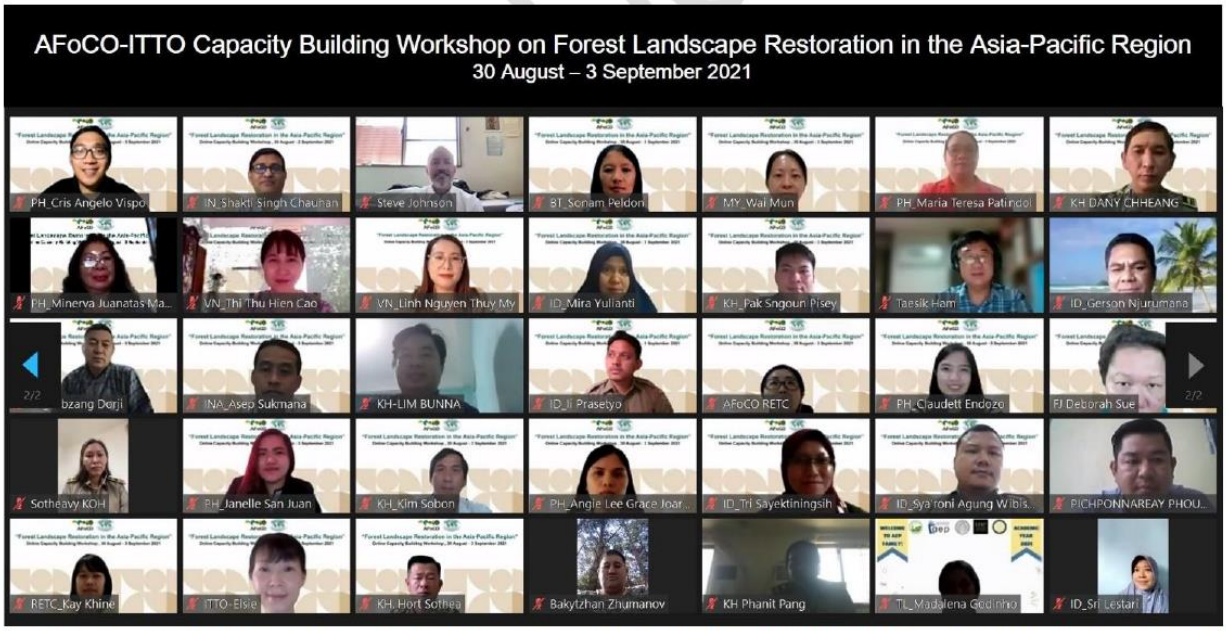
Participants with **Mr. Ricardo L. Calderon**, Executive Director of AFoCO Secretariat, **Dr. Michael Klein**, Deputy Executive Director of IUFRO, **Mr. Saidzoda Madibron Ikrom**, Head of the Forestry Agency under the Government of Tajikistan, **Mr. Nury Atamyradov**, Head of National Institute of Deserts, Flora and Fauna under the Ministry of Agriculture and Environment Protection of Turkmenistan, **Dr. Ma Hwan-ok**, Project Manager of ITTO, and **Dr. Promode Kant**, Director, Institute of Green Economy, India.



Participants with **Mr. Steven Johnson**, Officer-in-Charge of ITTO Secretariat and **Mr. Lobzang Dorji**, Director General of Department of Forest and Park Services, and **Mr. Chheang Dany**, Deputy Director General of Forestry Administration of Cambodia

Annex-5

AFoCO STEP Researchers of the Member Countries
(2019 ~ 2021)

Country	Number of STEP Researchers			Total
	2019	2020	2021	
Bhutan	1	-	-	1
Brunei Darussalam	1	-	1	2
Cambodia	1	-	1	2
Indonesia	-	1	-	1
Kazakhstan	-	-	1	1
Lao PDR	-	1	-	1
Mongolia	-	-	-	-
Myanmar	1	1	-	2
Philippines	-	-	-	-
Thailand	-	1	1	2
Timor-Leste	-	-	-	-
Viet Nam	1	-	-	1
Total	5	4	4	13

Annex-6

AFoCO Landmark Scholarship Recipients of the Member Countries

(2014 ~ 2021)

Country	Number of Scholarship Recipient		Total
	Doctoral	Master's	
Brunei Darussalam	-	-	-
Cambodia	1 (KNU)	1 (YU PSPS)	2
Indonesia	2 (UOS / KNU)	1 (YU PSPS)	3
Lao PDR	1 (CNU)	2 (KWNU / YU PSPS)	3
Malaysia	-	-	-
Myanmar	1 (SNU)	3 (CBNU / CNU / YU PSPS)	4
Philippines	-	2 (DKU)	2
Singapore	-	-	-
Thailand	2 (SNU / YU)	1 (YU PSPS)	3
Viet Nam	-	4 (YU PSPS / KMU / SNU / KNU)	4
Total	7	14	21

Abbreviations (in alphabetical order):

CBNU	Chungbuk National University
CNU	Chungnam National University
DKU	Dongguk University
KMU	Kookmin University
KNU	Kookmin University
KWNU	Kangwon National University
SNU	Seoul National University
UOS	University of Seoul
YU	Yeungnam University
YU PSPS	Yeungnam University, Park Chung Hee School of Policy and Saemaul

Annex-7

AFoCO Fellowship Officials of the Member Countries
(2015 ~ 2022)

Country	Number of Fellowship Officials						Total
	2015	2016	2019	2020	2021	2022	
Bhutan	-	-	1	1	1	1	4
Brunei Darussalam	-	-	-	-	-	1	1
Cambodia	-	1	1	1	1	-	4
Indonesia	1	-	-	-	1	1	3
Lao PDR	-	1	-	-	-	-	1
Kazakhstan	-	-	-	-	-	1	1
Malaysia	1	-	-	-	-	-	1
Mongolia	-	-	-	-	1	1	2
Myanmar	-	-	1	-	1	1	3
Philippines	-	1	-	-	-	-	1
Singapore	-	-	-	-	-	-	-
Thailand	1	-	-	-	-	1	2
Timor-Leste	-	-	-	-	1	1	2
Viet Nam	1	-	1	1	1	-	4
Total	4	3	4	3	7	8	29