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Regional Strategy and Action Plan for Forest and Landscape Restoration in Asia-Pacific

Promoting and accelerating forest and landscape restoration to enhance ecological functioning and human well-being in degraded and deforested landscapes of the Asia-Pacific region



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1. Introduction

The Asia-Pacific region has around 723 million hectares (ha) of forest (FAO, 2015), covering about 26 percent of the land area and providing goods and vital ecosystem services in support of agriculture, food security and nutrition, as well as climate change mitigation and adaptation. However, this vital role is being rapidly diminished due to overexploitation and unsustainable management of forests in the region, which have left over 500 million hectares of deforested and heavily degraded land in Asia and Oceania (Minnemeyer, et al., 2011). Degradation of forests can have severe negative local impacts and far-reaching consequences, including soil erosion, loss of biodiversity, greenhouse gas emissions, dust storms, diminished livelihood opportunities and reduced yields of forest products and services.

Reversing the adverse conditions requires urgent and scaled-up action, through scientific and holistic landscape-level restoration approaches, balancing both socio-economic and environmental goals and the diverse needs of various sectors and stakeholders in the landscape. The forest and landscape restoration (FLR) approach has gained momentum in recent years. The concept is based on the recognition that trees and forests comprise critical components of rural landscapes and that diversification at landscape levels can enhance ecological and socio-economic resilience while accommodating different site conditions and land management goals.

Given the increasing challenge of mitigating and adapting to climate change and vast expanses of degraded landscapes with decreased capacity to provide essential forest products and services, we are seeing increased political interest and commitment to enhance forest cover and functions, and to FLR, at both international and national levels. International commitments related to enhancing forest cover and ecological functionality include: The United Nations Framework Convention on Climate Change (UNFCCC) REDD+¹ mechanism; the Convention on Biological Diversity (CBD) Aichi Target 15 to restore at least 15 percent of degraded ecosystems by 2020; the Rio+20 land degradation neutral goal; Sustainable Development Goal (SDG) 15.2 to restore degraded forest and substantially increase afforestation and reforestation and SDG 15.3 on land degradation neutrality; the Bonn Challenge to restore 150 million hectares of deforested and degraded land by 2020 and 350 million hectares by 2030; and the New York Declaration on Forests of 2014 to restore an additional 200 million hectares by 2030. In the Asia-Pacific region, the Asia-Pacific Economic Cooperation (APEC) with 21 member economies adopted in 2007 an aspirational goal of increasing forest cover by at least 20 million hectares of all types of forests by 2020.

Significant national-level commitments have been made by many Asia-Pacific countries in their 'Intended Nationally Determined Contributions (INDCs)' submitted to the UNFCCC in 2015, to increase forest and tree cover as a key climate change mitigation contribution while also supporting national environmental, socio-economic and adaptation needs. Through a review of official government plans, REDD+ strategies and in-country multilateral investment programmes, the International Union for the Conservation of Nature (IUCN) has summarized

¹ REDD+ stands for countries' efforts to reduce emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks.



existing national restoration targets as follows: Bangladesh 0.1 million ha, China 15.8 million ha, India 10.4 million ha, Indonesia 29.3 million ha, Lao PDR 7.5 million ha, Nepal 0.7 million ha, Pakistan 1.8 million ha, Republic of Korea 6.3 million ha and Viet Nam 17.3 million ha.²

Efforts to enhance forest and tree cover and quality are not something new in the Asia-Pacific region. Several countries in the region have implemented large-scale nationwide reforestation, afforestation and/or forest rehabilitation efforts over the last decades resulting in various enhanced economic, ecological and social benefits. Despite a few countries achieving considerable success, overall deforestation and forest degradation have outpaced the forest restoration efforts and there are still huge areas of degraded forests and lands in need of restoration (FAO and RECOFTC, 2016). Further, many past reforestation efforts have had low long-term sustainability due to failure to address the underlying causes of degradation and deforestation, uncertain tenure, lack of consideration of local needs, failure to develop and adopt science-based techniques and dependence on short-term external funding (Gilmour and Lamb, 2016). Approaches to reforestation have primarily focused on extensive monoculture plantations of exotic species, and limited efforts have been made towards the establishment of native and mixed species forests focusing on ecological and local benefits. The enabling framework for involving and providing sustained benefits for a wider range of stakeholders in reforestation has been less than optimal in many places. However, the above-mentioned international and national commitments, the FLR approach and a wide range of financing prospects available now provide new opportunities to scale up efforts to effectively restore vast areas of degraded forests and landscapes of the Asia-Pacific region.

The term 'restoration' is used very broadly in this strategy document to cover all activities designed to bring back some form of tree cover on formerly forested lands and/or to enhance productivity and protective functions of forest ecosystems for socio-economic, ecological and/or environmental purposes. These include tree and forest establishment and/or improvement through planting, seeding, natural regeneration (both assisted and otherwise), agroforestry, enrichment planting and silvicultural management.

² <http://www.bonnchallenge.org/flr-desk>

2. Development of the Regional Strategy and Action Plan

With this background, the Food and Agriculture Organization Regional Office for Asia and the Pacific (FAO RAP) initiated an effort to develop a strategy and action plan for forest and landscape restoration in the region. The process started with a High-level Regional Consultation organized on 23 February 2016 in partnership with the Asia Pacific Association of Forestry Research Institutions (APAFRI), the Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet), IUCN and the World Resources Institute (WRI) during the Asia-Pacific Forestry Week (APFW) 2016 in Clark, Philippines. It was attended by 18 senior officials from member countries of the Asia-Pacific Forestry Commission (APFC) and 80 -100 other participants from research organizations, non-government organizations, academic institutions and multilateral banks active in restoration efforts in the region. The purpose of the consultation was to review current initiatives related to forest and landscape restoration, and to consider the establishment of some form of regional initiative or mechanism that could support the implementation of national strategies and actions and lay the foundation for coordinated regional dialogue and action on FLR.

The areas of consensus that emerged from the discussions were:

- A more scaled-up target will help to advance restoration efforts in the Asia-Pacific region.
- An increase in the target should be based on each country deciding what target is appropriate for their particular circumstances and reflecting the extent of degraded lands that could benefit from FLR as well as the needs of those living in and around these lands.
- The national targets should specify the type of FLR approaches needed (including increasing tree cover on agricultural lands) and seek to balance between production, environmental and social outcomes.
- Protecting remaining natural forests from degradation or deforestation should go hand-in-hand with restoration.
- A regional initiative or mechanism of some sort would be a useful approach to support and leverage national forest and landscape restoration efforts and mutual learning.
- Financing for national-level FLR needs to be accessed from a broad variety of sources: domestic finance, traditional donor aid, 'impact investors' interested in social and environmental outcomes as well as economic returns, corporate social responsibility (CSR) approaches, creative financing (e.g., from payments for ecosystem services, special fees and taxes, etc.), and more traditional investors.

Based on the outcomes of this meeting, FAO continued to facilitate the dialogue to develop this Draft Regional Strategy and Action Plan on Forest and Landscape Restoration. In this process, inputs were received from an extensive range of stakeholders, including APFC member countries; restoration experts; organizations, programmes, projects and networks active in forest restoration, researchers and academics. The draft Strategy and Action Plan was presented during a dedicated side event for Asia-Pacific representatives on the occasion of the FAO Committee on Forestry (COFO) in Rome on 22 July 2016, and discussed at the 12th and 13th meetings of the APFC Executive Committee as well as at a regional workshop on promoting natural regeneration as a tool for large-scale forest restoration organized in June 2017 in China. The draft was also circulated to the APFC member countries and other national and regional partners for their review. Feedback received through these processes has been incorporated into this current version of the strategy and action plan.

3. Building a common understanding of the FLR approach

Forest and landscape restoration is an emerging concept that is rapidly gaining in popularity. The Global Partnership on Forest and Landscape Restoration currently defines FLR as “an active process that brings people together to identify, negotiate and implement practices that restore an agreed optimal balance of the ecological, social and economic benefits of forests and trees within a broader pattern of land uses”.³

FLR is more than just planting trees - it is restoring a whole landscape ‘forward’ to meet present and future needs and to offer multiple benefits and land uses over time (IUCN, 2017). It can seek to restore many different types of benefits ranging from biodiversity conservation, watershed protection, timber production, climate change mitigation and livelihood enhancement among others at both site and landscape levels.

Taking a landscape-level view does not necessarily mean the complete restoration of a deforested or degraded landscape, or that every FLR initiative must be large-scale or expensive. However, it involves some careful planning and strategic targeting of sites requiring effort, and ensuring that site-level restoration decisions consider landscape-level objectives and impacts such as connectivity and downstream effects.

Social and ecological principles of the landscape approach are summarized in the table below.

Ten principles of a landscape approach agreed at international processes (Sayer, et al., 2013)	Principles for community-based FLR programmes (IUCN, 2015)
<ol style="list-style-type: none">1. Continual learning and adaptive management2. Common concern entry point3. Multiple scales4. Multifunctionality5. Multiple stakeholders6. Negotiated and transparent change logic7. Clarification of rights and responsibilities8. Participatory and user-friendly monitoring9. Resilience10. Strengthened stakeholder capacity	<ol style="list-style-type: none">1. Adequate social preparation2. Strong community leadership3. Transparency in handling funds4. Sustainable livelihood and food security measures (short- and long-term economic benefits)5. Sufficient and timely release of funds6. Adequate institutional arrangements and supportive policy environment7. Land tenure security8. Presence of extension officers9. Women at the forefront

³ <http://www.forestlandscaperestoration.org>

The Restoration Opportunities Assessment Methodology (ROAM) uses eight guiding principles for FLR (IUCN and WRI, 2014)







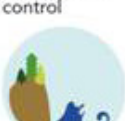
1. Focus on landscapes
2. Restore functionality
3. Allow for multiple benefits
4. Leverage suite of strategies
5. Involve stakeholders
6. Tailor to local conditions
7. Avoid further reduction of natural forest cover
8. Adaptively manage

Ecological principles for ecosystem restoration (Gann and Lamb, 2014)

1. Incorporating biological and environmental spatial variation into the design
2. Allowing for linkages within the larger landscape
3. Emphasizing process repair over structural replacement
4. Allowing sufficient time for self-generating processes to resume
5. Treating the causes rather than the symptoms of degradation
6. Include monitoring protocols to allow for adaptive management

FLR does not prescribe a single method within or across landscapes and countries. FLR is developed and tailored to fit individual landscapes based on an assessment of needs and conditions. Depending on the needs and conditions, different technical approaches such as reforestation, afforestation, ecological restoration, natural regeneration, assisted natural regeneration, enrichment planting and agroforestry can be adopted across the mosaic of land uses (Figure 1).

Figure 1. FLR options framework

Land Use	Land sub-type	General category of FLR option	Description
<p>Forest land</p> <p>Land where forest is, or is planned to become the dominant land use</p> <p>→ Suitable for wide-scale restoration</p>	<p>If the land is without trees, there are two options:</p>	<p>1. Planted forests and woodlots</p> 	<p>Planting of trees on formerly forested land. Native species or exotics and for various purposes, fuelwood, timber, building, poles, fruit production, etc.</p>
		<p>2. Natural regeneration</p> 	<p>Natural regeneration of formerly forested land. Often the site is highly degraded and no longer able to fulfil its past function – e.g. agriculture. If the site is heavily degraded and no longer has seed sources, some planting will probably be required.</p>
	<p>If the land is degraded forests:</p>	<p>3. Silviculture</p> 	<p>Enhancement of existing forests and woodlands of diminished quality and stocking, e.g., by reducing fire and grazing and by liberation thinning, enrichment planting, etc.</p>
<p>Agricultural land</p> <p>Land which is being managed to produce food</p> <p>→ Suitable for mosaic restoration</p>	<p>If the land is under permanent management:</p>	<p>4. Agroforestry</p> 	<p>Establishment and management of trees on active agricultural land (under shifting agriculture), either through planting or regeneration, to improve crop productivity, provide dry season fodder, increase soil fertility, enhance water retention, etc.</p>
	<p>If it is under intermittent management:</p>	<p>5. Improved fallow</p> 	<p>Establishment and management of trees on fallow agricultural land to improve productivity, e.g. through fire control, extending the fallow period, etc., with the knowledge and intention that eventually this land will revert back to active agriculture.</p>
<p>Protective land and buffers</p> <p>Land that is vulnerable to, or critical in safeguarding against, catastrophic events</p> <p>→ Suitable for mangrove restoration, watershed protection and erosion control</p>	<p>If degraded mangrove:</p>	<p>6. Mangrove restoration</p> 	<p>Establishment or enhancement of mangroves along coastal areas and in estuaries.</p>
	<p>If other protective land or buffer:</p>	<p>7. Watershed protection and erosion control</p> 	<p>Establishment and enhancement of forests on very steep sloping land, along water courses, in areas that naturally flood and around critical water bodies.</p>

Source: IUCN & WRI (2014).

4. Asia-Pacific Regional Strategy and Action Plan on Forest and Landscape Restoration to 2030 (APFLR)

4.1 Coverage

This is a regional strategy primarily covering the member countries of the Asia-Pacific Forestry Commission (APFC).

4.2 Nature of the strategy and action plan

This regional strategy and action plan on forest and landscape restoration is voluntary and non-binding and should be implemented in alignment with existing national legislations and international agreements where applicable. The regional strategy provides a broad framework within which interested countries can define action plans that fit their national context, circumstances and implementation capabilities. The strategy and action plan constitute an evolving document that can be updated in line with changing needs and context. This FLR strategy is intended to contribute to the achievement of existing international commitments and national goals to enhance tree and forest cover and ecological functionality.

4.3 Vision

Restored and sustainably managed landscapes across the Asia-Pacific region providing an optimal balance of ecological, economic and social benefits of forests and trees within a broader pattern of land uses.

4.4 Mission

To restore and enhance ecological functioning, resilience and human well-being in degraded and deforested landscapes of the Asia-Pacific region through scaled-up targets, actions, investment and collaboration.

4.5 Objectives

- Support efforts to advance implementation of FLR, including through mobilization of financing
- Strengthen stakeholder engagement, scientific basis, and ecological, social and economic sustainability of FLR efforts
- Enhance learning, collaboration and coordination on FLR across the region

4.6 Strategic priorities and actions

Strategic priority 1: Support the development and implementation of national FLR plans and targets

The APFLR should work closely with the interested countries to develop meaningful and realistic FLR plans and targets that are aligned with ongoing and planned efforts, national needs and circumstances. To start, the regional initiative could help identify and/or consolidate restoration targets in interested countries using available national data on degraded forests and lands, as well as national forest cover targets including those in INDCs/NDCs, national REDD+ strategies, National Biodiversity Strategy and Action Plans (NBSAPs) and other national strategies and plans. Subsequently depending on availability of resources and technical support, countries could undertake assessments and consultation processes with different sectors and actors to determine national FLR opportunities and priorities, taking into account local interest, and identifying potential sites to be restored on the ground which aggregate to more realistic national targets. The ROAM process could guide such an exercise. This should be accompanied by an assessment of knowledge, resource and capacity gaps to provide a strong basis for mobilizing technical and other assistance as needed from various national and regional partners and other ongoing initiatives.

An area-based target is relatively easy to understand for a wide range of stakeholders. However, placing too much emphasis on an area-based target may result in losing sight of the objectives of restoration. It is important to develop plans and targets focusing on specific benefits such as livelihood improvement, timber production, biodiversity conservation, increased resilience and other ecosystem services. This will help relate area targets to values of importance so that restoration activities can be specifically designed to achieve these objectives. National FLR plans should ideally specify locations, objectives and actors who will undertake the identified actions.

Since FLR seeks to enhance the role of trees and ecological functioning across different land uses at the landscape level, it is important to support and strengthen collaboration and coordination among the different sectors (e.g. forestry, agriculture, mining, infrastructure and others) that operate on the landscape. FLR should ideally be integrated into and synchronized with the existing sectoral and cross-sectoral policies and plans from national to local levels, and highlighted in NDCs, national development goals and other targets.

Actions:

1. Support national assessment of FLR priorities and opportunities, including identification of potential landscapes to be restored and restoration options, through a bottom-up process that considers local and national priorities, availability of degraded lands and ecological, economic and sociopolitical context.
2. Support the assessment of gaps in knowledge, resources, technology, policies and capacity that need to be filled.
3. Support participatory development and implementation of national/subnational FLR plans and targets by mobilizing stakeholders, providing technical assistance, strengthening institutions, developing capacity and fostering partnerships as required.

4. Support the integration and synchronization of FLR into existing sectoral and cross-sectoral policies and goals, as well as development planning frameworks at local and national levels.
5. Promote self-sustaining multiple benefit-sharing models for FLR involving the relevant sectors as well as ministries of finance and central planning agencies.
6. Support and strengthen national (and subnational) level FLR dialogue, partnerships, information sharing and coordination among key sectors, actors and initiatives through meetings, networks, working groups and exchange visits.
7. Support the implementation of appropriate long-term monitoring protocols for tracking and reporting on progress of FLR implementation and to allow for adaptive management (linked to action no. 19).

Strategic priority 2. Promote regional dialogue, learning, collaboration and coordinated action on FLR

A regional initiative endorsed by APFC member countries has the power to convene interested countries to work towards a common integrated FLR approach for ecological, social and economic benefits in the region. Many countries in the region share similar FLR challenges such as balancing environmental, social and economic development objectives, dealing with diverse ecological and social conditions, and facilitating effective cross-sectoral (agriculture, mining, energy and other) and multistakeholder coordination.

Given the large number of agencies and projects that are working on restoration, it is important to strengthen regional information sharing, synergies and coordination among key actors and projects. Furthermore, because FLR seeks to engage agriculture and other sectors that have significant impact on forests in order to enhance the role of trees and forests across different land uses, it is important to support and strengthen collaboration and coordination among the relevant sectors. At the country level, countries should set up working groups including representatives of key sectors and other stakeholders to guide the FLR efforts.

Actions:

8. Set up a regional network at the start, and possibly a small regional institution or secretariat later, to undertake regional-level actions and support national efforts on FLR.
9. Build political support for and raise awareness on the FLR concept, processes and benefits. Identify and promote local, national and/or regional champions to inspire action on FLR.
10. Consolidate an estimate of regional FLR potential by aggregating national targets in interested countries, and develop a realistic regional FLR target following national assessment of FLR priorities and opportunities.
11. Provide a knowledge and resource hub (using existing platforms as far as possible) to collect and distribute information, knowledge, resources and tools for FLR implementation and monitoring. (Options: online information repository, regional expert pool, webinars, e-newsletters, news and updates via social media, etc.)



12. Support collaboration and cross-learning among countries, practitioners, researchers, investors, donors and others working on restoration in the region. (Options: study visits, technology transfer, fostering partnerships, organizing workshops and e-discussion groups.)
13. Develop an effective communication strategy for the regional initiative to reach out to different stakeholder groups, using professional marketing support as well as appropriate media and language.
14. Use existing fora, events and other opportunities to share lessons, foster commitment and improve strategies in line with international and regional developments, opportunities and experiences.

Strategic priority 3. Build recognition for and support the use of various technical, social and institutional approaches as appropriate for different landscapes and restoration objectives

This APFLR initiative should build recognition of and support key actors in the use of various technical, social and institutional approaches as appropriate for different landscapes and objectives. It can point to and draw from the large and evolving body of guidance, tools and practical experience on technical options and approaches for restoration and sustainable management of different types of forests and lands. FAO's SFM Toolbox⁴ and the Global Partnership on Forest and Landscape Restoration (GPFLR) website⁵ provide a compilation of available tools and guidance.

It is also important for interested countries to put in place a system for monitoring FLR efforts in order to track and measure FLR progress, and to adapt targets and approaches based on monitoring feedback. Technical support in developing appropriate protocols for measuring impacts on the targeted biophysical and socio-economic parameters of interest will be useful to countries. IUCN is currently developing a progress tracking protocol called the Bonn Challenge Barometer of Progress to monitor commitments made to the global restoration goal. FAO is also working to develop guidelines on FLR monitoring and has recently drafted a paper titled 'Measuring Progress for Forest and Landscape Restoration' in collaboration with WRI.

Actions:

15. Build recognition of and support key actors in using various technical options and approaches for restoring and sustainably managing different types of forests and lands.
16. Assess the adequacy and accessibility of the existing information and guidance for the region, and provide support to fill in the gaps.
17. Develop guidelines for and support key actors in the implementation of FLR monitoring to enable tracking and reporting on restoration progress and outcomes, and for adapting targets and approaches when required.

⁴ <http://www.fao.org/sustainable-forest-management/toolbox/modules/en/>

⁵ <http://www.forestlandscaperestoration.org/tools>



18. Compile and share current global best practice and latest information on approaches and methods for FLR in a range of settings (through online platforms, online community of practice, workshops, field demonstrations, and other effective channels - use existing platforms and resources as far as possible).

Strategic priority 4: Facilitate and support the mobilization of financing for FLR

Commitment of funds from within the country and local actors is critical to ensure ownership and long-term sustainability of the FLR efforts. However, additional financial resources are often needed to augment country budgets to enable scaled-up implementation of FLR. There is an increasingly wide variety of funding sources that can be tapped for FLR ranging from national budgets, special fees and taxes, forestry and agribusiness investments, development cooperation, climate financing, social entrepreneurs, impact investors interested in social and environmental outcomes along with economic returns, CSR funds, payments for ecosystem service (PES) schemes, and more. UNCCD and FAO (2015) provide an overview of existing funding sources and financial instruments that could be used and adapted specifically for implementation of FLR efforts at the national and regional levels.

Attracting green financing to FLR projects requires identification of viable projects and investors, and promoting marketplaces to match and connect the two. It requires better understanding of the scope for financial, environmental and social sustainability and the risks for investors to take into account in their decision-making. Furthermore, countries often find it difficult to access the available donor funds, which may appear fragmented and be subject to complex processes. Capacity development is needed to help countries formulate proposals and navigate the application processes to access available funds.

In many countries and landscapes, lack of enabling conditions (including clear land tenure, supportive policies and regulations, good governance) makes it difficult to invest and increases the risks for investors. Large financial institutions have funds and interest in investing but no projects to invest in, while there are funding shortages at the local level.

Actions:

19. Share experiences of countries that were able to secure substantial domestic public funds for restoration, and support countries to mobilize such financing for FLR.
20. Develop capacity of countries to access available international public financing or donor funds, including climate finance.
21. Connect the countries, projects and programmes to investors through an existing or new marketplace. This may include:
 - a. Conduct a stocktaking of funding mechanisms and sources for FLR in the Asia-Pacific region.
 - b. Present a portfolio of countries with promising ongoing efforts and bankable FLR projects providing multiple benefits for the investors to consider.
 - c. Create a marketplace to connect the buyers and sellers of restoration projects to facilitate the investments.

Strategic priority 5: Encourage private sector participation and investment in FLR

Private enterprises and farmers have a large influence on the landscape. Engagement of these actors in the multistakeholder dialogue and integrated landscape planning, and their adoption of more sustainable land-use practices, is critical for the effort's success and sustainability. Further, the private sector could also take a more direct and active role in FLR either as implementers, service providers or investors.

Possible types of private sector engagement in FLR include:

- Improving management practices in their agricultural, mining and other land-use activities to enhance ecological integrity and human well-being in the overall landscape.
- Implementing restoration on state lands, private lands (including lands under concessions and leases), community or smallholder lands in partnership with government and local communities.
- Providing technical services to other stakeholders in implementing FLR.
- Providing marketing services.
- Investing in FLR.

Many well-established companies are adopting more sustainable practices and engage in restoration activities due to market demand or for CSR purposes.

Beyond CSR, there is a need to identify and demonstrate profitable business models for forest restoration that target environmental and social benefits. Carbon prices at present are low and PES markets are not clear enough yet for scaled-up private sector involvement. Combining crops, timber and non-wood forest products (NWFPs) through agroforestry and outgrower schemes has good potential and can include conservation activities in and around plantations. Mobilizing large-scale private sector investment in FLR will require an enabling environment that minimizes financial and institutional risks. It will also require synergies between different financing approaches and between forestry and the agricultural product value chains. An enabling framework includes land tenure clarity and security, stable and investment-friendly policies, simplified licensing systems, transparency, viable approaches and species for production of desired products, and marketing support.

Actions:

22. Identify how and where the private sector can play an active and useful role in FLR leading to sustainable outcomes.
23. Identify and share information on commercially viable restoration models that contribute to restoring landscape functionality and human well-being.
24. Identify and showcase environmentally, socially and financially sustainable restoration practices by the private sector including smallholders and start-ups, and help them connect to other market players as well as technical and financial support agencies.

25. Identify constraints for private sector involvement and investment in FLR initiatives, and support the development of an enabling environment (including legal framework, provision of incentives, partnerships and institutional arrangements) for their engagement.

Strategic priority 6: Support community-level action on FLR

Experiences across the Asia-Pacific region and elsewhere indicate that working closely with and empowering communities to act as land managers and to take the lead in FLR ensure long-term sustainability of restoration efforts and accrual of benefits to local communities. Clear and secure tenure rights to the land and/or resources, financial and technical support from government and others, and adequate livelihood opportunities at the start can go a long way to ensuring successful restoration of forests and landscapes. There are different ways of clarifying tenure beyond a vested private property model, such as clarifying communal tenure arrangements and having this recognized by the government as quasi-legal tenure. It is important to note that communities are not homogenous: different social groups have differential access to decision-making and benefits, based on, for example, gender, age, wealth, ethnicity or migration status. Community organizations need support in planning and implementing restoration in ways that enhance social inclusion.

Communities need information on sustainable restoration models that provide a mix of short- and long-term benefits, including agricultural crops, timber, NWFPs, tourism value and other PES options. Communities need consistent and supportive government policies on licensing and sale of forest products and ecosystem services. Assistance and capacity development for communities is required in restoration techniques, seed collection and propagation, silviculture, monitoring and adaptive management, production, processing, value addition and marketing.

In many countries, there is great need to mobilize and harness the tremendous social capital available in local communities for FLR through mass movements, as was done in the Republic of Korea, China, Viet Nam, Nepal and Australia. Key opportunities for community-level action and benefits exist in communal land, smallholder agricultural land, as well as in partnership with the government in state forest land for production, protection and conservation. Further, the private sector could also partner with communities in FLR and production through agroforestry and outgrower schemes.

There is ongoing local reforestation and spontaneous tree growing occurring in landscapes across the region. Documenting where it is happening and the driving forces behind it could indicate the kind of enabling policies and environment required at national and international levels to promote widespread FLR that benefits local communities.

Actions:

26. Identify opportunities for local people to engage in and benefit from FLR, and support countries to mobilize local communities and strengthen their role in FLR planning and implementation.



27. Compile and share information on the most promising technical, social and institutional approaches for generating short and long-term benefits for communities, including from products and ecosystem services.
28. Document viable models and stories of successful community engagement across the range of different landscapes, FLR objectives and approaches.
29. Support community efforts and create enabling environments by clarifying tenure, streamlining licensing procedures and fees, and providing links to private and public financing, extension services, technical and marketing support, capacity development and community livelihood programmes.
30. Facilitate partnerships and collaboration on FLR between local communities and other agencies including the government, the private sector and civil society organizations.

4.7 APFLR Action Plan

Potential actions	Actors
Strategic priority 1: Support the development and implementation of national FLR plans and targets	
1. Support national assessment of FLR priorities and opportunities, including identification of potential landscapes to be restored and restoration options, through a bottom-up process that considers local and national priorities, availability of degraded lands, and ecological, economic and sociopolitical context.	Countries supported by FAO and partners
2. Support the assessment of gaps in knowledge, resources, technology, policies and capacity that need to be filled.	Countries supported by FAO and partners
3. Support participatory development and implementation of national/subnational FLR plans and targets by mobilizing stakeholders, providing technical assistance, strengthening institutions, developing capacity and fostering partnerships as required.	Countries supported by FAO and partners
4. Support the integration and synchronization of FLR into existing sectoral and cross-sectoral policies and goals, as well as development planning frameworks at local and national levels.	Countries supported by FAO and partners
5. Promote self-sustaining multiple benefit-sharing models for FLR involving the relevant sectors as well as ministries of finance and central planning agencies.	Countries supported by FAO and partners
6. Support and strengthen national (and subnational) level FLR dialogue, partnerships, information sharing and coordination among key sectors, actors and initiatives through meetings, networks, working groups and exchange visits.	Countries supported by FAO and partners
7. Support the implementation of appropriate long-term monitoring protocols for tracking and reporting on progress of FLR implementation and to allow for adaptive management.	Countries supported by FAO and partners

Strategic priority 2. Promote regional dialogue, learning, collaboration and coordinated action on FLR

8. Set up a regional network at the start, and possibly a small regional institution or secretariat later, to undertake regional-level actions and support national efforts on FLR.	FAO, APFNet, partners, countries
9. Build political support for and raise awareness on the FLR concept, processes and benefits. Identify and promote local, national and/or regional champions to inspire action on FLR.	FAO & partners
10. Consolidate an estimate of regional FLR potential by aggregating national targets in interested countries and develop a realistic regional FLR target following national assessment of FLR priorities and opportunities.	FAO & partners
11. Provide a knowledge and resource hub (using existing platforms as far as possible) to collect and distribute information, knowledge, resources and tools for FLR implementation and monitoring.	FAO and partners, countries
12. Support collaboration and cross-learning among countries, practitioners, researchers, investors, donors and others working on restoration in the region.	FAO & partners
13. Develop an effective communication strategy for the regional initiative to reach out to different stakeholder groups, using professional marketing support as well as appropriate media and language.	FAO & partners
14. Use existing fora, events and other opportunities to share lessons, foster commitment and improve strategies in line with international and regional developments, opportunities and experiences.	FAO & partners

Strategic priority 3. Build recognition for and support the use of various technical, social and institutional approaches as appropriate for different landscapes and restoration objectives

15. Build recognition of and support key actors in using various technical options and approaches for restoring and sustainably managing different types of forests and lands.	FAO & partners
16. Assess the adequacy and accessibility of the existing information and guidance for the region, and provide support to fill in the gaps.	FAO & partners
17. Develop guidelines for and support key actors in the implementation of FLR monitoring to enable tracking and reporting on restoration progress and outcomes, and for adapting targets and approaches when required.	FAO & partners
18. Compile and share current global best practice and latest information on approaches and methods for FLR in a range of settings.	FAO & partners



Strategic priority 4: Facilitate and support the mobilization of financing for FLR

19. Share experiences of countries that were able to secure substantial domestic public funds for restoration, and support countries to mobilize such financing for FLR.	Countries
20. Develop capacity of countries to access available international public financing or donor funds, including climate finance.	FAO & partners
21. Connect the countries, projects and programmes to investors through an existing or new marketplace.	Countries, FAO & partners

Strategic priority 5: Encourage private sector participation and investment in FLR

22. Identify how and where the private sector can play an active and useful role in FLR leading to sustainable outcomes.	Countries, FAO & partners
23. Identify and share information on commercially viable restoration models that contribute to restoring landscape functionality and human well-being.	Countries, FAO & partners
24. Identify and showcase environmentally, socially and financially sustainable restoration practices by the private sector including smallholders and start-ups, and help them connect to other market players as well as technical and financial support agencies.	Countries, FAO & partners
25. Identify constraints for private sector involvement and investment in FLR initiatives, and support the development of an enabling environment (including legal framework, provision of incentives, partnerships and institutional arrangements) for their engagement.	Countries, FAO & partners

Strategic priority 6: Support community-level action on FLR

26. Identify opportunities for local people to engage in and benefit from FLR, and support countries to mobilize local communities and strengthen their role in FLR planning and implementation.	Countries, FAO & partners
27. Compile and share information on the most promising technical, social and institutional approaches for generating short- and long-term benefits for communities, including from products and ecosystem services.	Countries, FAO & partners
28. Document viable models and stories of successful community engagement across the range of different landscapes, FLR objectives and approaches.	Countries, FAO & partners
29. Support community efforts and create enabling environments by clarifying tenure, streamlining licensing procedures and fees, and providing links to private and public financing, extension services, technical and marketing support, capacity development and community livelihood programmes.	Countries, FAO & partners
30. Facilitate partnerships and collaboration on FLR between local communities and other agencies including the government, private sector and civil society organizations.	Countries, FAO & partners



Annex 1. International definitions of relevant terms

Terms	International definitions	Source
Reforestation	Re-establishment of forest through planting and/or deliberate seeding on land classified as forest.	FAO (2012)
Reforestation	Direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989.	UNFCCC (2002)
Afforestation	Establishment of forest through planting and/or deliberate seeding on land that, until then, was not classified as forest.	FAO (2012)
Afforestation	Direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.	UNFCCC (2002)
Ecological restoration	Process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.	SER (2004)
Ecological restoration	Restoration that aims to closely replicate the structure and floristic composition of the original forest cover and restore the ecological processes and biodiversity to a previous historical state.	ITTO (2005)
Restoration	Any intentional activity that initiates or accelerates the recovery of an ecosystem from a degraded state.	IPBES (2015)
Rehabilitation	Refers to restoration activities that may fall short of fully restoring a biotic community to its pre-degradation state, including natural regeneration and emergent ecosystems.	IPBES (2015)
Rehabilitation	A management strategy applied on degraded forest land that aims at restoring the capacity of a forest to produce products and services.	ITTO (2005)
Natural regeneration	Renewal of trees by self-sown seeds or natural vegetative means.	ITTO (2005)



Terms	International definitions	Source
Assisted natural regeneration	A method for enhancing the establishment of secondary forest from degraded grassland and shrub vegetation by protecting and nurturing the mother trees and their wildlings inherently present in the area. ANR aims to accelerate, rather than replace, natural successional processes by removing or reducing barriers to natural forest regeneration such as soil degradation, competition with weedy species, and recurring disturbances (e.g., fire, grazing, and wood harvesting). In addition to protection efforts, new trees are planted when needed or wanted.	FAO ⁶
Enrichment planting	The planting of desired tree species in a modified natural forest or secondary forest or woodland with the objective of creating a high forest dominated by desirable (i.e. local and/or high-value) species.	ITTO (2005)
Agroforestry	Agroforestry is a collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence.	FAO ⁷
Degraded forest	Forest that delivers a reduced supply of goods and services from a given site and maintains only limited biological diversity. It has lost the structure, function, species composition and/or productivity normally associated with the natural forest type expected at that site.	ITTO (2002)
Forest degradation	Reduction of the capacity of a forest to provide goods and services.	FAO (2002)
Degraded forest land	Former forest land severely damaged by the excessive harvesting of wood and/or non-wood forest products, poor management, repeated fire, grazing or other disturbances or land-uses that damage soil and vegetation to a degree that inhibits or severely delays the re-establishment of forest after abandonment.	ITTO (2005)
Land degradation	“Persistent decline” in the provision of goods and services that an ecosystem provides, including biological and water-related goods and services as well as land-related social and economic goods and services.	IPBES/3/18 ⁸
Degradation	Any combination of loss of soil fertility, absence of forest cover, lack of natural function, soil compaction, and salinization that either impedes or retards unassisted forest recovery through secondary succession.	UNEP/CBD/SBSTTA/11/INF/2 ⁹

⁶ <http://www.fao.org/forestry/anr/en/>

⁷ <http://www.fao.org/forestry/agroforestry/80338/en/>

⁸ http://www.ipbes.net/sites/default/files/downloads/Decision_IPBES_3_1_EN_0.pdf

⁹ <https://www.cbd.int/doc/meetings/sbstta/sbstta-11/information/sbstta-11-inf-02-en.pdf>

References

- FAO.** 2002. *Proceedings: second expert meeting on harmonizing forest-related definitions for use by various stakeholders.* Rome.
- FAO.** 2012. *Forest Resources Assessment Working Paper 180 - FRA 2015 Terms and Definitions.* Rome.
- FAO.** 2015. *Global forest resources assessment 2015.* Rome.
- FAO & RECOFTC.** 2016. *Forest landscape restoration for Asia-Pacific forests.* Bangkok.
- FAO & UNCCD.** 2015. *Sustainable financing for forest and landscape restoration - Opportunities, challenges and the way forward.* Rome.
- Gann, G. & Lamb, D.** 2014. *Introduction to "Ecological Restoration - a means of conserving biodiversity and sustaining livelihoods".*
- Gilmour, D. & Lamb, D.** 2016. *Forest landscape restoration - from aspirations to action. High-level regional consultation to develop an action plan for forest and landscape restoration in the Asia-Pacific.* Manila.
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).** 2015. *Thematic assessment on land degradation and restoration. Decision IPBES-3/1.* Bonn.
- ITTO.** 2002. *ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests.* Yokohama.
- ITTO & IUCN.** 2005. *Restoring forest landscapes: an introduction to the art and science of forest landscape restoration.* ITTO Technical Series No 23.
- IUCN.** 2015. *Integrating food security and livelihoods into watershed rehabilitation.* (available at <https://www.iucn.org/sites/dev/files/content/documents>).
- IUCN.** 2017. *Forest landscape restoration.* (available at <http://www.iucn.org/theme/forests/our-work/forest-landscape-restoration>).
- IUCN & WRI.** 2014. *A guide to the Restoration Opportunities Assessment Methodology (ROAM): Assessing forest landscape restoration opportunities at the national or sub-national level. Working Paper (Road-test edition).* Gland.
- Minnemeyer, S., Laestadius, L., Sizer, N., Saint-Laurent, C. & Potapov, P.** 2011. *A world of opportunity.* Washington, D.C., World Resources Institute.
- Sayer, J., Sunderland, T., Ghazoul, J., Pfund, J., Sheil, D., Meijaard, E., Venter, M., Boedhihartono, A., Day, M., Garcia, C., van Oosten, C. & Buck, L.** 2013. Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses. *Proceedings of the National Academy of Sciences of USA*, 110 (21): 8349 - 8356.
- Society for Ecological Restoration (SER).** 2004. *The SER international primer on ecological restoration.* Washington, D.C.
- UNFCCC.** 2002. *Report of the Conference of the Parties on its seventh session.* Marrakesh.



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