



Guide

Introduction to forest landscape restoration in Southeast Asia

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Introduction to forest landscape restoration in Southeast Asia

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Introduction to forest landscape restoration in Southeast Asia

Guide

October 2020

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List of abbreviations

AFD	Agence Française de Développement (French Development Agency)
CBR+	Community-Based REDD+
CSO	Civil Society Organization
FAO	Food and Agriculture Organization of the United Nations
FLR	Forest Landscape Restoration
GEF	Global Environment Facility
GPFLR	Global Partnership on Forest and Landscape Restoration
ITTO	International Tropical Timber Organization
IUCN	The International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau (German state-owned development bank)
Lao PDR	Lao People's Democratic Republic
NESDP	National Economic and Social Development Plan
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SDG	Sustainable Development Goal
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UN-REDD	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
WRI	World Resources Institute
WWF	World Wildlife Fund

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This guide reflects RECOFTC's more than 30 years of experience in building capacity for community forestry in the Asia-Pacific region. The questions in the guide come from RECOFTC's discussions with stakeholders in its FLOURISH project in Lao PDR, Thailand and Viet Nam. FLOURISH is an innovative four-year forest landscape restoration (FLR) initiative that uses market forces combined with community forestry to combat climate change, restore degraded forests and improve the well-being of forest communities.

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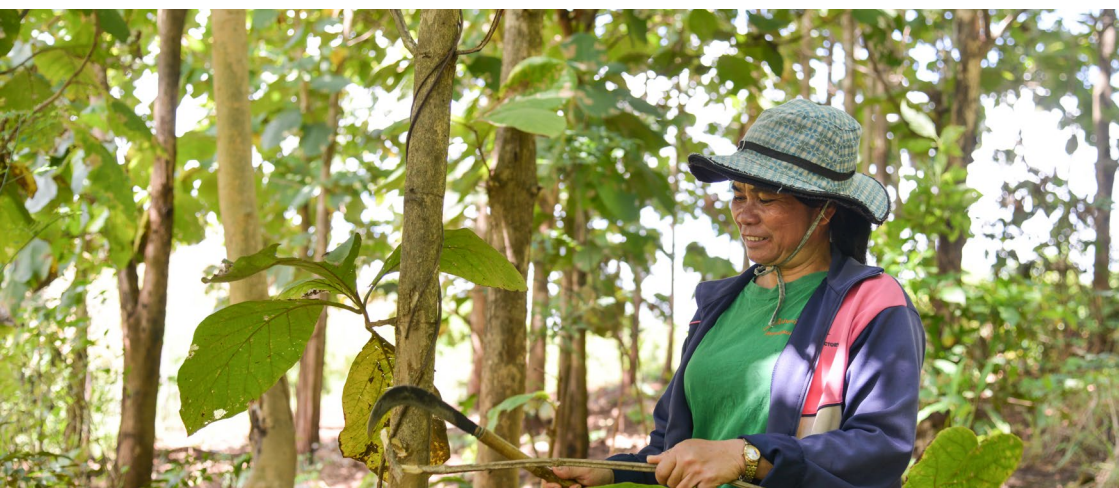


Introduction

This guide is for forestry practitioners from local communities, governments, the private sector, civil society and academia in Southeast Asia. It explains the fundamentals of forest landscape restoration (FLR) and serves as a starting point for future exploration and design of FLR initiatives.

FLR is a process that people, governments and other groups can undertake to regain ecological functionality and enhance human well-being across deforested or degraded forest landscapes. FLR involves more than just planting trees. It is about restoring a whole landscape to meet present and future needs and to offer multiple benefits and land uses over time.

This guide explores stakeholder mapping and engagement, gender sensitivity, benefit sharing, financing and other aspects of FLR. It includes information for forest practitioners about other tools for learning and practising FLR, as well as further reading.



Teak farmer Khampy Phetlangsy harvests teak from her plantation in Nakong Village, Xayaboury. Smallholder teak plantations are vital for local livelihoods and to meet the country's National Determined Contribution (NDC). Xayaboury, Lao PDR, June 2019.

Understanding FLR can inspire solutions and accelerate contributions to overcoming the global climate crisis. Forests are essential in the fight against climate change. A healthy forest absorbs greenhouse gases and locks in carbon. It also increases resilience to climate change for animals, plants and people living in and around it.

Healthy forests boost agricultural productivity by enhancing pollination, pest control, nutrients and water. On the other hand, deforestation and forest degradation release greenhouse gases, accelerating climate change. Moreover, reduced or degraded forests are more vulnerable to wildfire, soil erosion, flooding, drought and other effects of climate change.

Despite international agreements, forests are cut and degraded at an alarming rate, and restoration is lagging. An estimated 30 percent of the world's original forested area is gone, and 20 percent is degraded. According to the Food and Agriculture Organization of the United Nations (FAO), Southeast Asia alone lost more than 30 million hectares of forest between 1990 and 2015. This was more than 11 percent of its total forest area.

As forests disappear, so do biodiversity, livelihoods and protection against climate change. The poorest and most vulnerable communities are most at risk of climate-induced natural disasters, food insecurity and migration. However, we all lose: the worldwide cost of forest loss is US\$2–5 trillion a year.

The United Nations' agreements on climate change and biodiversity call for restoration of deforested and degraded forestlands. About 2 billion hectares of land worldwide would benefit from restoration. The 2011 Bonn Challenge aimed to restore 350 million hectares by 2030, a target adopted by the New York Declaration on Forests in 2014. The target was endorsed by Thailand in January 2016 and by Viet Nam in 2014.

International agreements emphasize local communities' interest in restoring and preserving their forest landscapes. The benefits are both immediate and long-term: improved livelihoods, restored habitats, absorption of greenhouse gases, and greater resilience against the impacts of climate change.

Deforestation and forest degradation are particularly acute in Southeast Asia. Many countries and organizations have implemented forest restoration initiatives that have increased forest cover. Some of these initiatives were put in place to produce timber rather than to restore and

conserve ecosystems and their services. These programs were focused largely on the areas within the boundaries of forest reserves. They did not tap the potential of local communities to manage and restore primary and secondary forests, timber plantations, and agricultural and degraded lands.

FLR can help address these gaps. Through FLR, local communities, governments, the private sector, civil society and academia as landscape stakeholders identify, consider and negotiate restoration options and land-use trade-offs transparently. By fostering the participation of many stakeholders, FLR balances social, economic and environmental goals and ensures that costs and benefits are equitably shared. In this way, FLR delivers a wide range of benefits to stakeholders: income, carbon storage, wood, fuel, food, biodiversity conservation and many more.

FLR is particularly important in Southeast Asia, where many tenure issues remain unresolved, resulting in power differences among landscape stakeholders. The effects on local communities that rely on forests for life and livelihoods can be devastating.



The sun filters through the tree tops at O Taneung Forest Community, a newly restored forest area in Kratie, Cambodia, August 2019.

Unfortunately, many governments in Southeast Asia have limited capacity. They often don't have the resources to enforce effectively forest laws to stop illegal logging and address other causes of deforestation and forest degradation such as forest pests and diseases, forest fires and forest conversion to agriculture.

The chapters in this guide are structured around 10 questions:

1. What is FLR?
2. Why is FLR important?
3. Who are the stakeholders in FLR and how might they benefit?
4. How can we identify and prioritize FLR stakeholders within a specific landscape?
5. How do we develop and implement an FLR program?
6. What are the major challenges in the FLR process?
7. Why and how should we consider gender equality in FLR?
8. What are some sources of finance for FLR?
9. What initiatives, policies and commitments support FLR?
10. Why and how should FLR synergize with REDD+?



1 What is forest landscape restoration?

A landscape is an area with varied land uses, such as natural forests, secondary forests, timber plantations, farmland and degraded lands.

In 1999, WWF and IUCN began examining how higher-quality forest landscapes could meet human needs, conserve biological diversity and provide ecosystem functions for all life on Earth. The new process was named forest landscape restoration.

The following year, WWF and IUCN organized a workshop that defined FLR as “a planned process that aims to regain ecological integrity and enhance human well-being in deforested or degraded forest landscapes.” Since then, many organizations have applied the concept and refined it.

For example, the Global Partnership on Forest Landscape Restoration 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.”

Put more simply, FLR is about restoring the landscape in a participatory way to enhance human well-being.

In 2007, Stewart Maginnis and William Jackson published *What is FLR and how does it differ from current approaches?*. It identified the following aspects of FLR:

- FLR is a flexible process with three main features. It is participatory, requiring the engagement of stakeholders to be successful. It is based on adaptive management, therefore responsive to social, economic and environmental change. And it requires both an adequate monitoring program and an appropriate learning process.

- FLR seeks to restore ecological processes at the landscape scale to maintain biodiversity and ecosystem functions, and confer resilience to environmental change.
- FLR seeks to enhance human well-being by restoring ecosystem services.
- FLR implementation is at a landscape scale, so site-level decisions must be made within a landscape context.

How FLR differs from other forest restoration approaches

FLR is far more comprehensive than conventional forest restoration approaches in analyzing local contexts and designing interventions for multiple purposes. It considers landscape objectives and the impacts of and on different stakeholders.

FLR goes far beyond planting trees and simply increasing forest cover. By contrast, many large-scale restoration programs in Asia have focused on fast-growing, exotic species and timber production. This led to valid criticism over their claims of improving forest quality and human well-being.



Community members from Tha Village in Xayaboury map out the area's resources during a participatory land use planning training held by RECOFTC. Involvement of all stakeholders is a vital part of forest landscape restoration. Xayaboury, Lao PDR, July 2019.

Another distinguishing feature of FLR is that stakeholders in the landscape participate throughout the process. FLR works with stakeholders to identify and address the root causes of deforestation and forest degradation, and to jointly develop solutions. FLR processes emphasize local needs and national priorities equally. They acknowledge that top-down approaches will be counterproductive in the medium to long term. This contrasts with many traditional restoration initiatives in Asia that focused insufficiently on stakeholder engagement, if at all.

FLR also differs from other approaches in the way it recognizes complexity and uncertainty. Local needs, priorities and patterns of resource use change over time. External influences such as climate change, market forces and policies make them even less predictable. FLR needs to be grounded in an adaptive management process that includes iterative monitoring and learning. This was not often the choice of large-scale, top-down restoration projects.



2 Why is forest landscape restoration important?

According to FAO's Global Forest Resources Assessments, Southeast Asia lost more than 30 million hectares of forests between 1990 and 2015. This was more than 11 percent of its total forest area. The loss had significant socio-economic and environmental impacts, particularly on poor and rural communities.

Forest loss and degradation exacerbate local and global problems related to food and livelihoods, clean water, fresh air and the climate. Degraded landscapes are also more vulnerable to natural disasters and extreme weather conditions, such as heavy rainfall, floods and landslides.

FLR has great potential to address these issues by enhancing landscapes in ways that ensure lasting benefits. Benefits include better local climate regulation, improved flood and erosion control, an increased variety and availability of food and non-food products, and economic opportunities for local people.

FLR can support climate change mitigation and adaptation, while enhancing ecological and livelihood values for the landscape and its people. In time, this can translate into improved quality of life and increased resilience of people who depend on forests.

Benefits of FLR

Environmental protection

FLR enhances forest protection and restoration, soil conservation, water source protection, air quality, local climate and biodiversity conservation.

Sustainable livelihoods

FLR increases supplies of landscape products such as food, water, timber and biomedicines. Therefore, FLR offers communities that depend on forests opportunities for income generation and sustainable livelihoods.

Climate resilience and disaster risk reduction

FLR can support climate change mitigation and adaptation while enhancing ecological and livelihood values for the landscape and its people. The improvement of forest and other resources through FLR processes can also reduce disaster risks such as floods, droughts, landslides or outbreaks of pests.

Transparency and accountability

FLR provides opportunities to improve or create new institutional structures for stakeholder engagement. It boosts stakeholder consultations, participation and ownership. This can bring greater transparency and accountability to decision-making processes on contentious issues such as land tenure, land-use management and water access.



Thbong Domrey community member picks mushrooms in the community forest. Mushrooms are one of many non-timber forest products that community members harvest to supplement local livelihoods. Thbong Domrey, Kampong Thom, Cambodia, 2019.

Social inclusion

FLR promotes meaningful participation in decision-making by disadvantaged groups, whose voices and opinions are often ignored. This includes poor and landless people, women, youth, and ethnic minorities and indigenous groups. These groups may become empowered and more widely acknowledged by other stakeholders as a result of participatory processes, capacity building and improved economic and social returns from their sustainable practices.

Cross-sectoral integration

FLR promotes stronger collaboration among landscape stakeholders and brings sectors together to negotiate solutions at the landscape level.

Sustainable development

FLR can contribute to the achievement of the UN Sustainable Development Goals (SDGs), particularly towards SDG1, 2, 5, 6, 13 and 15.





3 Who are the stakeholders of forest landscape restoration and how might they benefit?

Stakeholders include any people or organizations that can directly or indirectly affect or be affected by an FLR initiative. Four broad stakeholder groups are:

- Local communities
- Governments
- Private sector parties
- Civil society organizations and academia

These groups often have different values, interests and approaches. Interests can also vary within each group. For example, government land and water agencies could have conflicting interests with mining and energy agencies. Some civil society organizations focus on community livelihoods, while others work on biodiversity conservation.

The process of designing and implementing FLR brings these stakeholders together as equal partners to negotiate mutual interests and collaborative partnerships. The following section summarizes the roles and interests of each stakeholder group, as well as the potential benefits FLR can provide them.

Local communities

These are people living in or near the landscape. They can be differentiated by sources of livelihood, such as wage-earners, forest-dwellers, farmers and traders, or by ethnicity, wealth and power. The landscape is part of their culture and identity. It provides goods and services, such as food, water, livelihoods and safety, that they rely on for development and survival.

Local people, especially marginalized groups, are strongly affected by decisions made about their landscape. They are also most vulnerable to

hazards associated with poor forest management, including forest fires, floods and landslides. As the largest group of direct and long-term forest users, local communities can have immense positive and negative impacts on resources.

Communities have important knowledge about forest management that is valuable for designing, implementing, monitoring and evaluating FLR initiatives. For these reasons, local communities can and should play a pivotal role in ensuring the effectiveness and sustainability of any FLR efforts.

Potential benefits of FLR to local communities include:

- Increased access to products and services in the landscape, contributing to improved livelihoods and social security in the long term
- More economic opportunities through restoration-related jobs and activities, and through trade and value-addition of forest products and services
- Improved grassroots institutions and multi-stakeholder platforms as a pre-condition or by-product of FLR processes, which contributes to addressing inequality gaps in gender, resource access and benefits, participation and representation
- Enhanced overall resilience and adaptive capacity, especially for marginalized groups



Community members participate in a meeting with local government representatives and private sector companies to discuss potential partnerships in lung bamboo material supplies as part of RECOFTC's FLOURISH project. Nghe An, Viet Nam, 2019.

Government

Government stakeholders include ministries and agencies that manage forests, land, water resources and related livelihood issues in the landscape. Their interests can include other sectors such as agriculture, mining and infrastructure. They can be based within the landscape or outside it.

Government stakeholders develop and implement laws and policies. Depending on their roles, locations and administrative levels, their decisions will affect the landscape to different degrees. However, they often have the strongest impacts on the landscape and on other stakeholders.

Potential benefits of FLR for government stakeholders include:

- Increased progress towards national and sub-national targets on restoration, biodiversity conservation and poverty reduction
- Boosted local economic development and livelihoods through improved value chains, taxes and revenues
- Reduced gender and social inequalities



Community members participate in a meeting with local government representatives and private sector companies to discuss potential partnerships in lung bamboo material supplies as part of RECOFTC's FLOURISH project. Nghe An, Viet Nam, 2019.

- Closer engagement with local communities and other stakeholders while developing and implementing policies and strategies
- Improved stakeholder understanding of, and compliance with, relevant laws and policies
- Increased policy impacts on long-term ecological sustainability and economic efficiency
- Reduced conflict over natural resources, especially land and forests
- Harmonized indigenous and local knowledge with science and technology

Private sector

Private sector actors can be based within the landscape or outside it. Most operate in the landscape for profits, engaging in supply chains of forest-related products and services or in other sectors such as agriculture, mining and energy. There are also private sector actors that invest in the landscape for social benefits such as social credits, networks, visibility and branding.

Private businesses play a pivotal role in improving supply chains and adding value to products and services. They create jobs and income for



Lung bamboo products are crafted for export by an employee at Duc Phong company, Nghe An Province, Viet Nam. Local communities are working in partnership with Duc Phong company to supply lung bamboo materials, supported by RECOFTC's FLOURISH project. Nghe An, Viet Nam, 2019.

local people. Private sector actors can also be significant sources of FLR financing. However, their activities can create conflicts with or among local communities, most commonly because of unfair benefit sharing and a lack of knowledge about customary tenure rights.

Potential benefits of FLR for the private sector include:

- Expanded business and partnership opportunities from enhanced supplies of products and services from the landscape
- More opportunities to engage with and be understood by other landscape stakeholders, resulting in a more business-friendly environment in the landscape
- Strengthened social credentials thanks to sustainability and social activities that they engage with during FLR process

Civil society organizations (CSOs) and academia

These stakeholders can include non-profit and non-governmental organizations, community-based organizations and research and education institutes. Their interests vary from human rights to animal rights, from environmental sustainability to social-economic development.

They play a supporting role, often helping communities and local



CSO representatives share their perspectives during a session on REDD+ safeguard information systems. Siem Reap, Cambodia, June 2017.

government to achieve FLR goals. Their work ranges from data and research to financing and implementing FLR activities. Their presence is important in landscapes where local actors lack capacities and resources to initiate FLR activities. However, in some cases, poorly-planned interventions by CSOs and academia can cause conflict among different interest groups.

Potential benefits of FLR for these stakeholders include:

- Opportunities to introduce their perspectives and to influence local stakeholders through platforms created through FLR processes
- Improved access to local knowledge and resources



4 How can we identify, prioritize and coordinate FLR stakeholders in a specific landscape?

It is always challenging for developers of FLR initiatives to identify the 'right' stakeholders and their representatives, and then prioritize them for different levels of engagement in FLR.

The following questions can help. They are based on the work of John Stanturf and colleagues (2017) at the International Union of Forest Research Organizations.

- What are the common livelihood strategies related to the landscape?
- What are the commodity chains related to the landscape and who is involved at each stage?
- How are statutory rights and customary rights claimed by different land-users in the landscape?
- Who pays for or invests time or money in FLR?
- Who is affected by restoration and how?
- Do those affected have the capacity to participate?
- If people need support in order to participate, who provides it?

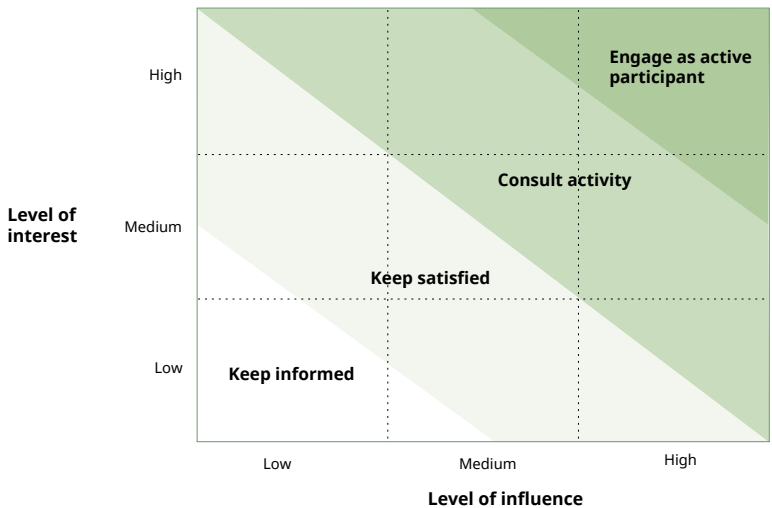
These questions focus on the rights and entitlements of different groups. This is important in Southeast Asia, where overlapping statutory and customary rights and associated conflicts prevail.

It is also important to look at the commodity chains in the landscape to identify those who are not always visible through the lenses of land use, land ownership or direct benefits. And because the interests, roles and influence of stakeholders can change over time, frequent reviews and updates are needed.

The process of prioritizing stakeholders for engagement is highly contextual. FLR programs and projects may use different sets of criteria, principles or tools to assist this process. In general, levels of interest and influence can be used to prioritize stakeholders and develop strategies for engaging each of them.

Figure 1 shows a matrix that FLR practitioners can use to do this. It groups stakeholders according to their levels of interest and influence. The diagonal bands show which of four simplified engagement strategies might be most appropriate for each stakeholder.

Figure 1. Matrix indicating levels of stakeholder influence and interest



Source: Adapted from British Office of Government Commerce, 2007

Ensuring that stakeholder groups are balanced and representative is important. It is also challenging, and there is a risk of excluding groups or individuals. A failure to engage local communities and ensure they benefit fairly from FLR can lead to conflicts or lack of compliance. This might undermine or even jeopardize FLR efforts. Government agencies, private sector actors and civil society organizations must therefore recognize, engage and support communities in an effective and equitable manner.

Marginalized people in particular will struggle to enter effective and equitable negotiations. FLR programs should try to close these gaps. Facilitators can use participatory approaches from early on in the process to engage those who are the most vulnerable to changes in the landscape. Capacity building can help ensure these groups are able to take part in discussions and negotiations.

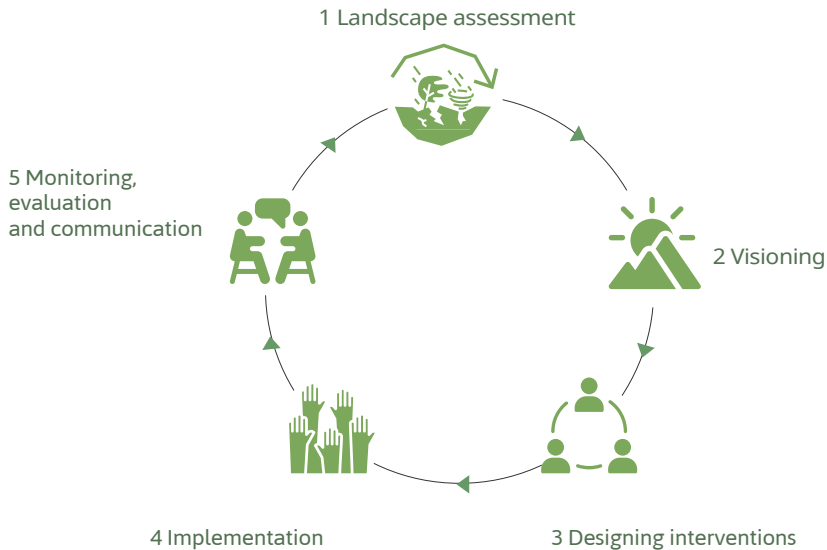
The complexity and importance of multi-stakeholder processes in FLR means that practitioners need to understand the stages where engagement and coordination happen, and potential challenges in each stage.

Public-Private-Civic Partnerships for Sustainable Landscapes: A Practical Guide for Conveners provides detailed instructions on how to engage and coordinate stakeholders from government, the private sector and civil society throughout a sustainable landscape program.



5 How do we develop and implement a forest landscape restoration program?

As FLR is highly contextual, there is no fixed approach. In general, an FLR program cycles through five stages. For each stage we have highlighted some things for practitioners to consider.



Stage 1



Landscape assessment

- Ensure supportive legal and policy frameworks are in place, for example, for forest restoration and stakeholder engagement
- Map local resources, especially in areas that are degraded or where there is conflict over resources: this includes natural resources such as forest, land and water; landscape products and services; available techniques and technologies; infrastructure; and financial resources
- Identify and map stakeholders and their needs and interests
- Identify key inequality issues and their root causes, such as a gender analysis

Stage 2



Visioning

- Obtain the free, prior and informed consent of stakeholders to participate in FLR
- Establish a platform where multiple stakeholders, especially vulnerable groups like women and people with low incomes, can represent themselves fairly in discussions and negotiations
- Using the landscape assessment results, identify the underlying causes of landscape degradation and restoration potential
- Discuss and agree on ecological and socio-economic goals of FLR in the landscape

Stage 3



Designing interventions

- Discuss different restoration pathways and interventions for different kinds of current land use; see IUCN and WRI 2014 the following: in the section References
- Develop a fair cost and benefit-sharing mechanism
- Design a monitoring, evaluation and communication system
- Discuss roles and responsibilities of each stakeholder
- Establish grievance and redress mechanism

Stage 4



Implementation

- Jointly develop a detailed plan that includes interventions, costs, timing and responsibilities
- Mobilize and allocate resources according to the plan

Stage 5



Monitoring, evaluation and communication

- Monitor and evaluate progress in a participatory way
- Learn from experiences and make necessary adjustments as part of an adaptive management process
- Communicate results and lessons with other interested groups

More guidance

To learn more about developing and implementing FLR, see *Forest Landscape Restoration for Asia-Pacific Forests*. This report describes the history, major policies and programs of forest restoration in Indonesia, Myanmar, the Philippines, Thailand and Viet Nam. It analyzes different technical approaches and provides an economic assessment of different restoration strategies. It also highlights the conditions for success and makes recommendations that practitioners could learn from.

One important lesson from Lao PDR, Thailand and Viet Nam is that the livelihoods of the neediest groups should be improved when persuading them to invest in forest protection. Identifying benefits that can be generated quickly can help sustain the commitment of these stakeholders.

Another useful report is *Decision Support Tools for Forest Landscape Restoration*. It identifies the following principles for FLR processes.

- Focus on landscapes: Implement interventions within a broad context of interacting land uses and land holdings, including managed and unmanaged ecosystems.
- Engage stakeholders and support participatory governance: Actively engage stakeholders, particularly vulnerable groups, in planning and decision-making.
- Restore ecological functions: This can be achieved by improving habitats for wild species; enhancing productive land uses; preventing erosion and flooding; increasing resilience to climate change and other disturbances; and integrating forest functions into land-use management plans to promote conservation and sustainable use of forests.
- Use a variety of restoration approaches: Combine suitable technical strategies, such as natural regeneration, agroforestry and different types of tree plantings.
- Conserve and enhance natural ecosystems: Stop deforestation and degradation of natural forests and associated ecosystems and enhance the recovery and conservation of forest remnants in the landscape.
- Tailor to local context: Adapt approaches to local social, cultural, economic and ecological values and needs.

- Restore the provision of diverse ecosystem goods and services that benefit multiple stakeholder groups: These goods and services include improved soil fertility; reduced erosion; shade; timber and non-timber forest products; carbon storage; and increased downstream water supply and quality.
- Adjust restoration approaches over time as environmental conditions, knowledge, capacity, stakeholder needs and societal values change: Integrate information and knowledge from monitoring activities, research and stakeholder guidance into plans and decisions as restoration progresses.



6 What are the challenges in the forest landscape restoration process?

It is not easy to stop a vicious cycle of degradation caused by over-exploitation and replace it with a virtuous cycle of FLR. Challenges include how to ensure meaningful participation by marginalized stakeholders (Question 4) and how to address gender inequalities (Question 7).

Other common challenges are:

Time

FLR is a long process. Trees take time to grow and engaging diverse stakeholders is time-consuming. Stakeholders need opportunities to learn about each other and to discuss, negotiate and agree on different aspects of FLR. These include priorities, boundaries, budgets, roles and responsibilities. FLR also touches upon deep-rooted, sensitive issues, such as land rights and tenure, land-use planning, illegal logging and wildlife hunting. These issues require a much longer process.

Costs

There are considerable direct costs associated with coordination, stakeholder engagement and implementation of FLR interventions. There are also costs of foregone opportunities, such as those related to reduced harvests or income lost as result of changing from the existing land use. Such costs differ for each stakeholder group.

Fairness

The general benefits of FLR will be enjoyed by landscape stakeholders and other indirect groups. However, poor people and other marginalized groups will be more deeply affected by the immediate restrictions in resource access and use that result from FLR. This could put the success of FLR in peril. Early and careful calculation of costs and benefits for each group, especially the most marginalized groups, should be carefully

studied. More information about this can be found in *A Cost-Benefit Framework for Analyzing Forest Landscape Restoration Decisions*.

Unquantifiable goods and services

“The Economics of Restoration” states that economic tools can help quantify non-monetary benefits and costs. The publication also points out that many ecosystem goods and services are not amenable to market valuation despite their indisputable ecological or social values. This poses an enormous challenge in discussions and negotiations among stakeholders who decide FLR priorities.

Conflicting views

Interest-based conflicts among stakeholder groups are almost unavoidable during FLR processes. Governments may pursue ecological and environmental gains, while local communities seek better livelihoods and businesses prioritize economic targets. Trade-offs are inevitable. It is therefore crucial to facilitate negotiations and resolve conflicts, ideally with a neutral moderator. To read more on stakeholder processes, see Emborg et al (2012) and Kusumanto (2005).



Local government and community forest members measure tree biomass. Stakeholder collaboration is vital to ensure forest management practices and other land-related FLR interventions are effective. Quy Chau district, Nghe An, Viet Nam, 2019.

Complexity

FLR is a multi-disciplinary approach that involves diverse stakeholders. They bring to the discussion table a diverse range of technical perspectives, interests and values, including land rights and tenure, culture, biodiversity and wildlife, water, timber and ecotourism. These issues are intertwined. For example, land rights and tenure need to be clarified and secured to ensure forest management practices and other land-related FLR interventions are effective.

Uncertainty

These are factors that change over time under external pressures, such as market forces, climate change, natural disasters and political directions. With so many variables, it is extremely challenging to understand and manage the complexity of FLR projects or programs for positive results, especially in the long-term.



7 Why and how should we consider gender equality in forest landscape restoration?

Gender equality and women's empowerment are crucial for sustainable development. Across Southeast Asia, many women work in agriculture and forest product collection. Their knowledge and skills related to resource use and management can make important contributions to sustainable management of forests and to FLR.

But in many countries, women's voices and opinions are often overlooked in local discussions and decisions. Traditional practices also often restrict women from owning land or accessing resources, including information. Women's participation in FLR processes is key, as many important decisions will be made about issues that affect women, including land use and control, restoration approaches and priorities, and how costs and benefit are shared.



Involving women can contribute to the sustainability and long-term effectiveness of forest restoration, as well as gender equity. Quang Nam, Viet Nam, October 2019.

Risks of ignoring gender

If FLR processes ignore gender equality issues, they can exacerbate inequalities and further restrict women's access to land and resources. *Gender matters in Forest Landscape Restoration: A framework for design and evaluation* identifies several risks, including:

- Increased women's workload without proper compensation
- Imprecise identification of primary stakeholders of forests, drivers of deforestation, forest management, agricultural practices and appropriate options for restoration
- Limited sustainability and long-term effectiveness of restoration
- Increased marginalization of women in decision-making
- Establishment or reinforcement of inequitable systems for benefit-sharing

These risks can threaten the success of the FLR program and sustainable development more broadly. By contrast, fairness in resource use and control, FLR priorities, and cost and benefit sharing can promote local buy-in and enhance communities' capacities. Equitable participation in decision-making should lead to better socioeconomic development and environmental outcomes for everyone in the forest landscape.

Gender-responsive FLR

FLR processes should ensure that participants have equal rights, opportunities and benefits regardless of gender. There are various tools and approaches for integrating gender equality and social inclusion. They involve common fundamental questions and steps that help to analyze and address gender inequality issues surrounding labour division, resource access and control, power and influence in decision-making, participation and benefit sharing.

For example, the framework for gender-responsive FLR in *Gender Matters in Forest Landscape Restoration* states that:

- Different social groups of women and men must be entitled to free prior and informed consent
- Fair and legitimate compensation must be offered to all those affected by displacement of land or livelihoods

- There needs to be an adequate, accessible and effective grievance system
- Both women and men must have equal say in all decisions related to FLR
- Restoration must reflect the priorities, interests and knowledge of both women and men
- Restoration efforts must recognize and equally compensate both women's and men's efforts in labour, financial or in-kind contributions
- Restoration benefits must be equitably distributed

Mainstreaming gender

A first step in mainstreaming gender issues into FLR is a gender analysis. *How to Mainstream Gender in Forestry* suggests asking these questions of men and women at the household, local, national, regional and global levels in such an analysis:

- Labour: Who does what? How? Where? When? Why?
- Access: Who uses what? How? Where? When? Why?
- Power over decision-making and control: Who controls what? How? Where? When? Why?
- Power over information: Who knows what? How? Where? When? Why?
- Benefit sharing: Who benefits from what? How? Where? When? Why?
- Participation: Who is included in what? How? Where? When and Why?



Women are central to Lung bamboo collection and processing in Viet Nam. Nghe An, Viet Nam, August 2019.

The guide *How to Mainstream Gender in Forestry* identified the following ways to help close gender gaps in the forest sector once a gender analysis is complete.

Participation

One way to empower women is to increase their participation in a range of activities. These include in community forest management groups, small- and medium-scale enterprises, NGOs and village administration, and marketing and selling non-wood forest products. Setting gender quotas in FLR activities and encouraging women's participation in leadership and decision-making positions are examples of how to do this.

Capacity development

These activities can enhance women's and men's ability to collaborate equally and effectively. In most cases, capacity building activities should be tailored to the specific needs of women. Further interventions might be necessary to remove barriers to women's participation in these events.

Institution building

Institutional challenges include deeply-rooted gender biases, poor technical capacity on gender matters and limited budget allocations for gender issues. It is important to promote gender analysis, including by reviewing management structures, and to provide training and other support to improve gender-balance.

Gender-disaggregated data

A widespread lack of gender-disaggregated data presents a significant challenge in forest policy planning. Disaggregated data will be necessary for developing gender-responsive policies and programs, and for enhancing awareness and understanding of women's roles in FLR.



8 What are some sources of finance for forest landscape restoration?

The FAO and Global Mechanism of the UNCCD (2015) identified sources of finance for FLR initiatives. The main sources are as follows:

Climate finance

Several instruments have been developed to finance action on climate change. Examples include the Clean Development Mechanism, REDD+ finance (Question 10), the Green Climate Fund, the Adaptation Fund, the World Bank's Forest Investment Program and national climate funds.

Development banks and international agencies

These agencies provide grants and zero- or low-interest loans to developing countries. Major donors include World Bank Group, European Commission, Asian Development Bank, French Development Agency, Japan International Cooperation Agency, KfW Development Bank and the United States Agency for International Development.

Environmental funds

These funds vary greatly in terms of the amount and sources of funding. The Global Environment Facility, funded by various countries, is among the largest. Public-private partnerships such as the Land Degradation Neutrality Fund are another important source. National funds, such as Viet Nam's Forest Protection and Development Fund, channel finance to districts and provinces.

International non-governmental organizations

International organizations that support FLR work by national and local CSOs include: World Resources Institute and its Global Restoration Initiative; Conservation International and its Global Conservation Fund; International Union for Conservation of Nature; World Wide Fund for Nature; The Nature Conservancy; and Collaborative Forest Landscape Coalition.

National budgets and resources

Few countries have explicit FLR budgets. However, certain public expenditure can be associated with FLR. Examples include land tenure clarification; land conversion restriction; benefit sharing; public participation and safeguard policies; FLR awareness raising; emissions trading; payment for ecosystem services; and green certification.

Private sector engagement

Significant funding potential from the private sector remains untapped. Private investors seek different kinds of returns, including sustainability through corporate social responsibility; financial from traditional investors; or mixed sustainability-financial returns from impact investors. They can be local, national or multinational companies.

Other non-traditional or innovative funding

Examples include citizen-based initiatives, such as crowdfunding and green bank cards, that direct a percentage of customers' spending to fund environmental initiatives.



9 Which initiatives, policies and commitments support forest landscape restoration?

International bodies and individual countries have made pledges and taken action to restore degraded lands in ways that are relevant to FLR.

Global initiatives and commitments

Reducing Emissions from Deforestation and Forest Degradation known as REDD+ is the largest international FLR-related initiative, with funding of billions of US dollars. It aims to stop or reverse forest loss and degradation and create alternative land-use options like forest plantations and agroforestry in developing countries. See Chapter 11 for more on REDD+ and its synergies with FLR.



Deforestation and forest degradation in Kbal Damrey commune, Sambo district, Kratie, Cambodia, August 2020.

The Bonn Challenge and New York Declaration on Forests are the other major international initiatives promoting FLR. The Bonn Challenge is a commitment made in 2011 to restore 150 million hectares of degraded and deforested lands around the world by 2020. In 2014, the New York Declaration on Forests endorsed the Bonn Challenge and extended its target to 350 million hectares to be restored by 2030. By May 2020, 62 governments, private associations and companies had pledged to restore more than 172 million hectares.

The Global Commission on the Economy and Climate found that meeting the 2030 target would generate US\$170 billion a year in net benefits from watershed protection, improved crop yields and forest products, and would help limit climate change by storing 1–3 gigatons of carbon dioxide each year.

Action towards the SDGs can also support FLR. Goal 15 refers specifically to restoration of land and forests and includes the aim of a ‘degradation neutral’ world by 2030.

National initiatives and policies

Many countries in Southeast Asia have targets to increase forest cover (Table 1), but none has made pledges under the Bonn Challenge or the New York Declaration on Forests. However, many do have policies and programs that support the achievement of their targets. For example, FAO & RECOFTC (2016) identified the following elements of Thailand’s policy framework that support forest restoration:

- Thailand’s 2017 Constitution promotes public participation in every sector
- The National Economic and Social Development Plan supports multi-scalar and cross-sectoral collaboration in development, including for people-centred development
- The 5th NESDP (1982–1986) set the target of 40 percent forest cover.
- The 8th NESDP (1997–2001) promoted reforestation and rehabilitation of degraded land through expansion of protected areas, plantations and community forestry
- The Land, Natural Resources and Environment Policy (2011) promotes participatory approaches in forest management

Despite the existence of supportive policy frameworks in Southeast Asian countries, a common concern of multiple stakeholders is that decision-making processes often fail to engage communities. Addressing this gap is vital if governments are to reach their targets and create a favourable environment for FLR.

Table 1: Degraded land, forest cover and reforestation targets in some Southeast Asian nations

Country	Estimated degraded land (million hectares)	Estimated degraded land as % of total land area	Current forest cover (change 2010-15)	Target forest cover (year)
Cambodia	2.6	15%	54% (-1.3%)	60% (2030)
Indonesia	56.9	30%	53% (-0.7%)	53% (2020)
Lao PDR	8.7	36%	41%3(+1%)	70% (2020)
Malaysia	-	-	68% (+0.1%)	-
Myanmar	4.2	6%	44% (-1.8%)	45% (2030)
Philippines	7.6	25%	27% (+3.3%)	30% (2028)
Thailand	2.3	4%	32% (+0.2%)	40% (2036)
Viet Nam	9.7	30%	48% (+0.9%)	45% (2020)



10

Why and how should forest landscape restoration synergize with REDD+?

Deforestation and forest degradation are responsible for more than 10 percent of the global greenhouse gas emissions that cause climate change. The Reducing Emissions from Deforestation and Forest Degradation (REDD+) initiative was established to help address this.

REDD+ is an initiative to reduce carbon emissions from deforestation and forest degradation. The plus sign recognizes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries. REDD+ offers a framework and significant resources that could be used for FLR. In return, FLR can assist different phases of a REDD+ program.

How REDD+ and FLR are mutually supportive

REDD+ and FLR both seek to identify and tackle the root causes of deforestation and forest degradation. REDD+ does this to curb emissions. FLR helps landscape stakeholders agree on a sustainable restoration solution to enhance the landscape's overall productivity.

REDD+ attracts global and national attention to the benefits of forests and urges investments in forests. This can help FLR encourage stakeholder participation and attract financial support. In return, FLR's participatory approach and social equity focus can reinforce REDD+ safeguards (Box 1).

FLR can also benefit from the huge amount of work already done for REDD+ in areas such as policy influencing and stakeholder capacity development, mainly for local and indigenous communities. In exchange, FLR could provide a landscape lens that enables REDD+ programs to increase sustainability and broaden their impacts beyond forests.

If the forest carbon market materializes as envisaged by REDD+, the private sector and other funders would find forest investments, including for FLR, more attractive. Even before that time, financing opportunities for REDD+ can support FLR interventions. For example:

- UN-REDD was launched in 2008 to help develop national REDD+ strategies. By May 2020, it had spent nearly US\$300 million.
- The Forest Carbon Partnership Facility's Readiness Fund and Carbon Fund could support the REDD+ activities in selected countries. As of May 2020, the participating countries in Southeast Asia were Cambodia, Indonesia, Lao PDR, Thailand and Viet Nam.
- The Global Environment Facility also provides REDD+ financing as part of its wider investment in sustainable forest management, which totalled US\$250 million in 2014–2018.
- At the local level, the Community-Based REDD+ (CBR+) Small Grants of up to US\$50,000 was launched by UN-REDD and GEF in 2015.

Box 1: REDD+ safeguards

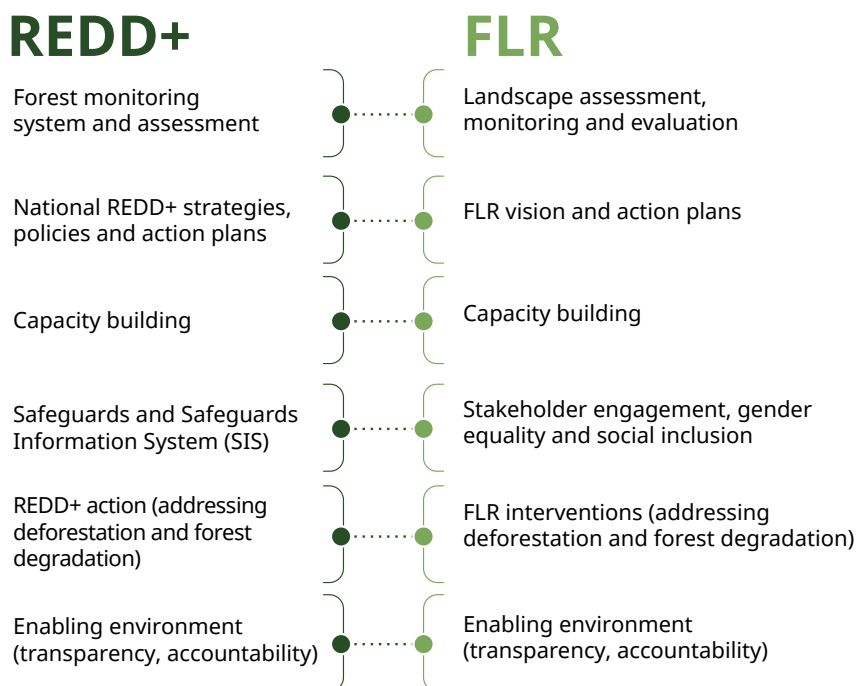
In 2010, Parties to the UN Framework Convention on Climate Change agreed on seven safeguards to protect against social and environmental risks related to REDD+. Among other things, the safeguards require:

- Respect for the knowledge and rights of indigenous peoples and members of local communities
- The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities
- That actions are consistent with the conservation of natural forests and biological diversity to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits, taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests in most countries

Corresponding activities

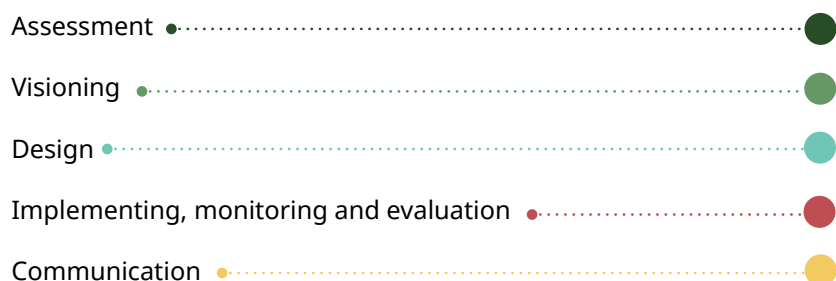
Since REDD+ and FLR both seek to address deforestation and forest degradation, there are potential overlapping interventions and activities. Figure 2 gives examples of possible areas of synergy. Practitioners and facilitators should note that these are only suggestions. More analysis is needed as synergies between REDD+ and FLR can vary across local contexts.

Figure 2. Examples of corresponding areas of work between REDD+ and FLR



ANNEX 1: Tools, guidelines and further reading on forest landscape restoration

This section indicates the stage of FRL at which each of the listed publications are most relevant. For full details of each publication, see the section References.



ITTO guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests (ITTO 2002): Provides a set of principles and recommended actions to promote and encourage the management, restoration, rehabilitation and sustainable use of degraded and secondary forests as a component of sustainable social and economic development



Restoring forest landscapes: An introduction to the art and science of forest landscape restoration (ITTO & IUCN 2005): Explains the FLR concept and its main elements, including adaptive management; landscape mosaics; landscape dynamics; stakeholder approaches; identification of site-level options; hands-on site-level forest restoration/rehabilitation strategies; scenario modelling; monitoring and evaluation



How to plant a forest: The principles and practice of restoring tropical forests (Elliott et al. 2006): Offers forest restoration techniques relevant to different types of tropical forests; draws primarily on research by Chiang Mai University's Forest Restoration Research Unit; offers insights on how to engage with local communities in technical aspects of restoration



Restoring tropical forests: A practical guide (Elliott et al. 2013): Presents scientific restoration techniques for tropical forest ecosystems using indigenous tree species for biodiversity conservation, environmental protection and local livelihood support



A guide to Restoration Opportunity Assessment Methodology (IUCN & WRI 2014): Helps identify restoration interventions and priority areas, quantify costs and benefits, and analyze success factors and financing options



Atlas of Forest Landscape Restoration opportunities (GPFLR 2014): An interactive atlas using base maps with layers of restoration opportunities, forest conditions, existing and potential forest coverage, and human pressure



- Assessment ● Implementing, monitoring and evaluation
- Visioning ● Communication
- Design

A cost-benefit framework for analyzing Forest Landscape Restoration decisions (Verdone 2015): Provides a framework for accounting ecosystem services and economic impacts of FLR activities to help understand trade-offs of different scenarios



Sustainable financing for forest and landscape restoration: Opportunities, challenges and the way forward (FAO & Global Mechanism of the UNCCD 2015): Provides an overview FLR financing, costs and benefits, funding sources and financial instruments for FLR efforts; presents the main challenges and solutions to support sound investment in FLR



The restoration diagnostic: A method for developing Forest Landscape Restoration strategies by rapidly assessing the status of key success factors (WRI 2015): Introduces a three-step process for developing strategies for successful forest landscape restoration; a stand-alone tool as well as a component of Restoration Opportunities Assessment Methodology (ROAM)



Success from the ground up: Participatory monitoring and forest restoration (Evans and Guariguata 2016): Provides a framework and highlights multiple aspects, including steps of participatory monitoring of FLR



Implementing Forest Landscape Restoration: A practitioner's guide (Stanturf et al. 2017): Helps practitioners design, implement, monitor and communicate the results of FLR programs and projects, with strong consideration of climate mitigation and adaptation



- Assessment ● Implementing, monitoring and evaluation
- Visioning ● Communication
- Design

Public-private-civic partnerships for sustainable landscapes: A practical guide for conveners (Heiner et al. 2017):



Introduces the strategy that landscape leaders can develop to plan, implement and monitor the actions of multi-stakeholder landscape partnerships and coalitions; touches on some challenges like addressing different stakeholders' perspectives about the landscape, coordinating action at multiple scales and aligning business motivations with those of other stakeholders

Gender matters in Forest Landscape Restoration: A framework for design and evaluation (Sijapati Basnett et al. 2017):



Provides a framework for gender-responsive FLR

Gender-responsive restoration guidelines: A closer look at gender in the Restoration Opportunities Assessment Methodology (IUCN 2017):



Guidelines for ensuring that ROAM application and the ensuing FLR implementation are gender-responsive; includes identifying, understanding, negotiating and implementing FLR in ways that can close gender gaps

Biodiversity guidelines for forest landscape restoration opportunities assessments (Beatty et al. 2018):



Helps practitioners translate and communicate the importance of their work into a biodiversity context, and mainstream biodiversity in other sectors; landscape strategies derived from assessment will help ensure that FLR investments produce returns in biodiversity

- Assessment ● Implementing, monitoring and evaluation
- Visioning ● Communication
- Design

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