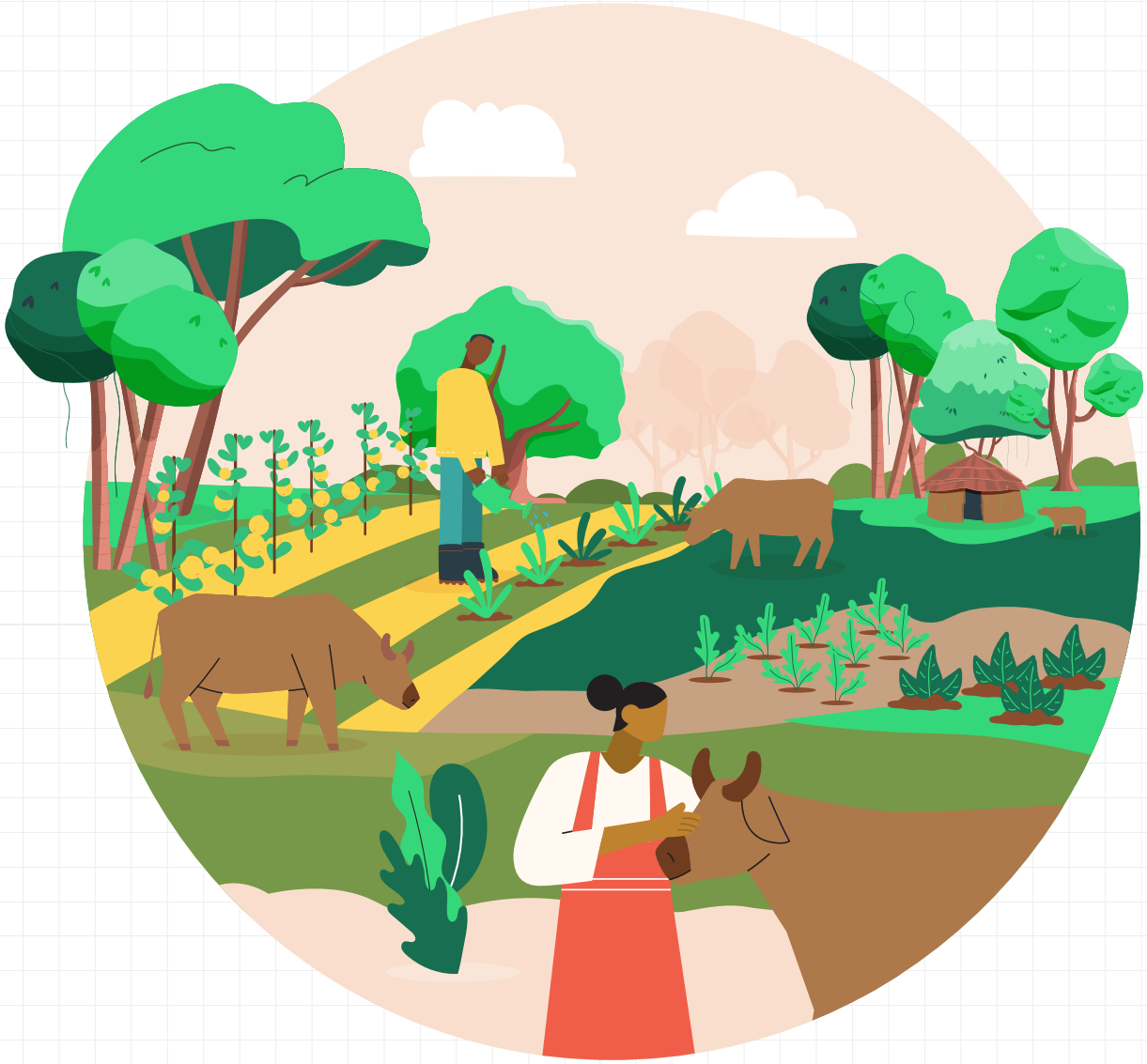
MODULE

2 Forest Landscape Restoration and Gender



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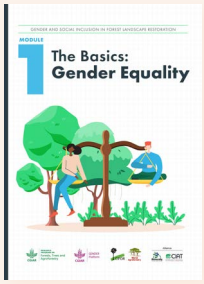
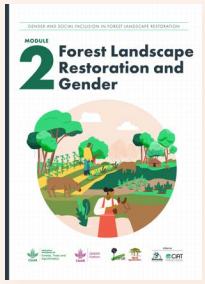
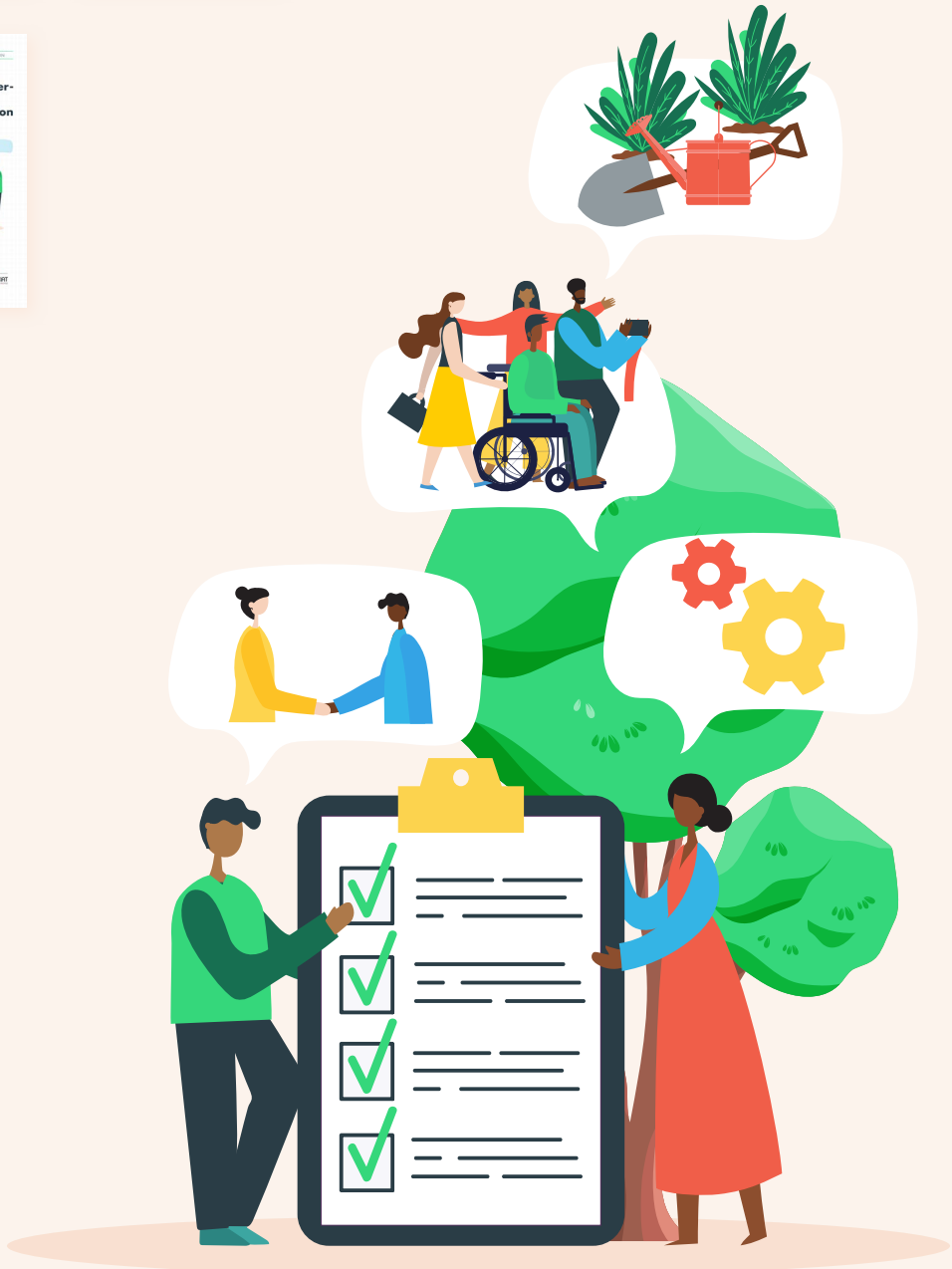
About this guide

This guide supports the Gender and Inclusion in Forest Landscape Restoration (FLR) e-learning course. The course aims to build the capacities and understanding of diverse stakeholders on the gender and FLR nexus and address inequalities for more equitable and sustainable FLR.







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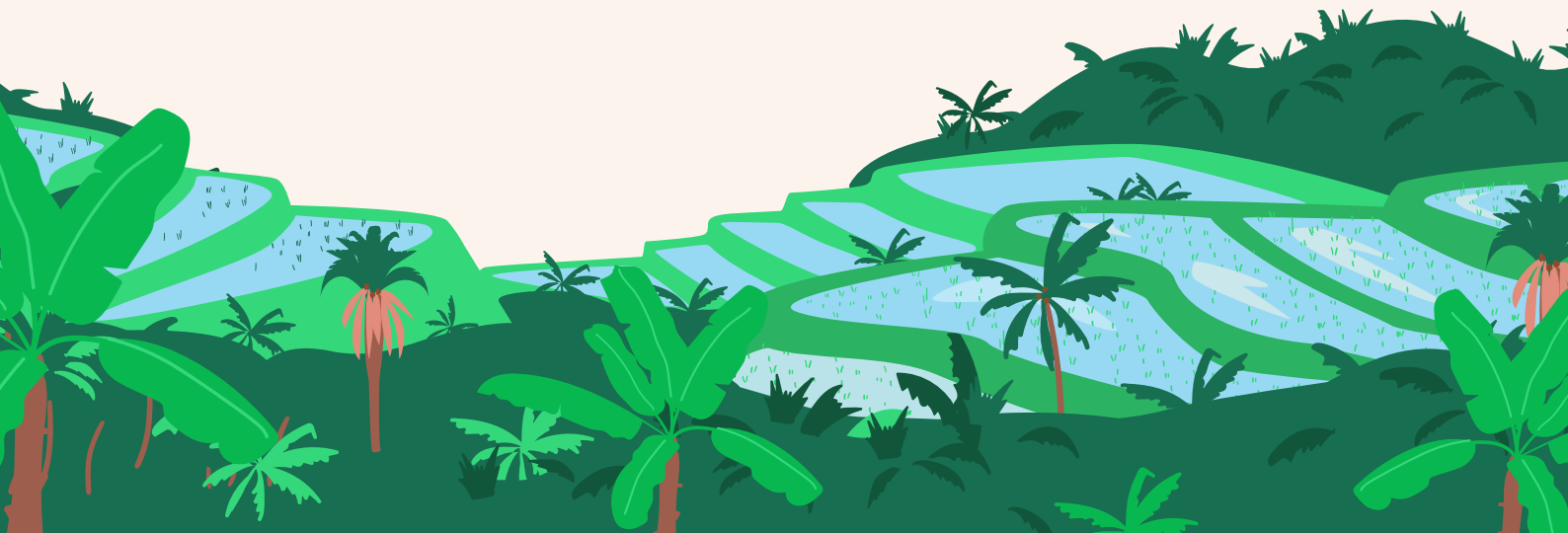


PART **ONE**

Forest and landscape restoration

1 Introduction

Forest and landscape restoration (FLR) is the process of reversing the degradation of soils, agricultural areas, forests and watersheds, thereby regaining their **ecological functionality**. FLR is a "process that aims to regain ecological integrity and enhance human well-being in deforested and degraded landscapes".[1]

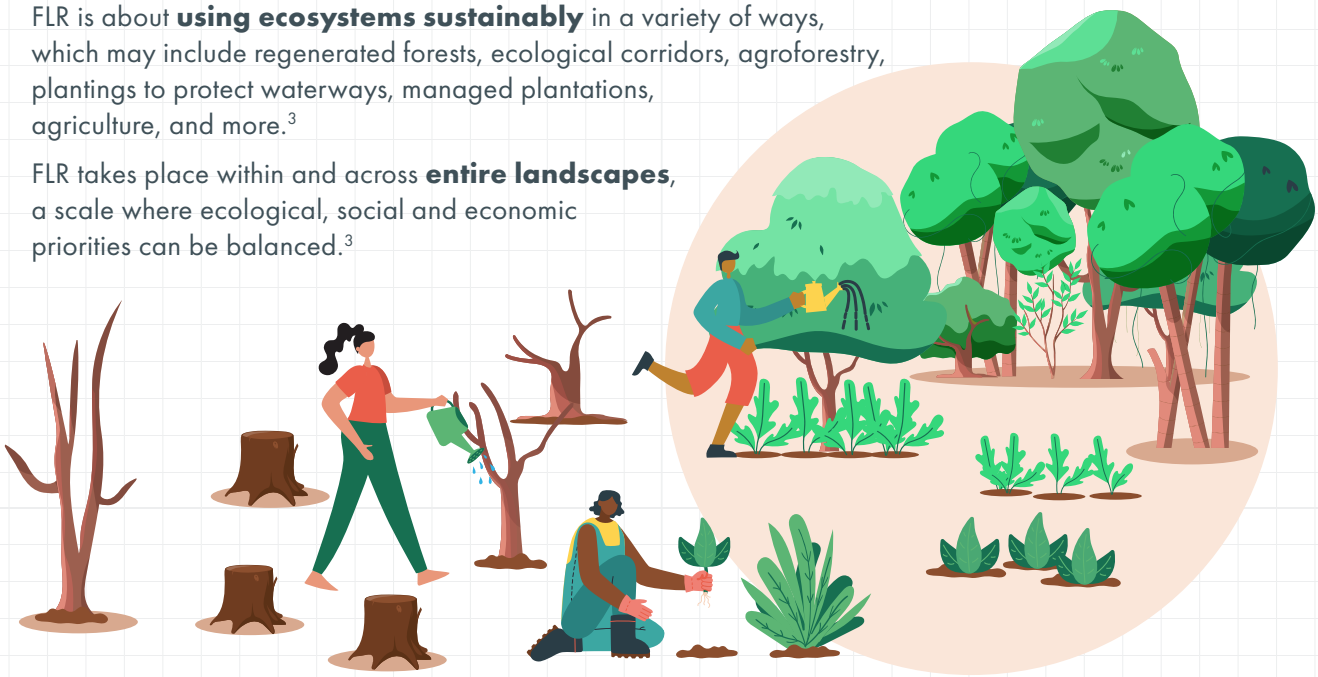
KEEP IN MIND

FLR seeks positive ecological and human well-being outcomes.

Restoration can occur in various ways. For instance, it may involve integrating a greater number and variety of tree species into gardens, farms, fields and forests; or allowing natural regeneration of overgrazed, polluted or otherwise degraded ecosystems. It is a process to improve the productivity and capacity of landscapes to meet the various and changing needs of society.[1,2]

It is not just about planting trees...

- FLR prioritises both **ecological health** and **human livelihoods**.
- FLR is about **using ecosystems sustainably** in a variety of ways, which may include regenerated forests, ecological corridors, agroforestry, plantings to protect waterways, managed plantations, agriculture, and more.[3]
- FLR takes place within and across **entire landscapes**, a scale where ecological, social and economic priorities can be balanced.[3]



There is no single restoration formula...

- FLR must be **tailored to the local context** using a variety of locally appropriate methods and approaches.
- It **relies on stakeholders** to identify restoration objectives, and to draw on the latest science, best practices, and traditional and indigenous knowledge to choose intervention types. For example, one country may only want to strengthen ecosystem resilience by increasing forest connectivity and diversity. Yet, a neighbouring country might prioritise carbon sequestration and water protection, planting trees for climate change mitigation and carbon credits and to protect rivers from sedimentation.[3] Local populations may have altogether different objectives, such as food security, nutrition, and soil fertility.[4]

"FLR harnesses the power of nature to provide benefits to people's livelihoods, improve access to essential resources, create and restore habitats for countless species, and store vast amounts of carbon to help mitigate climate change."

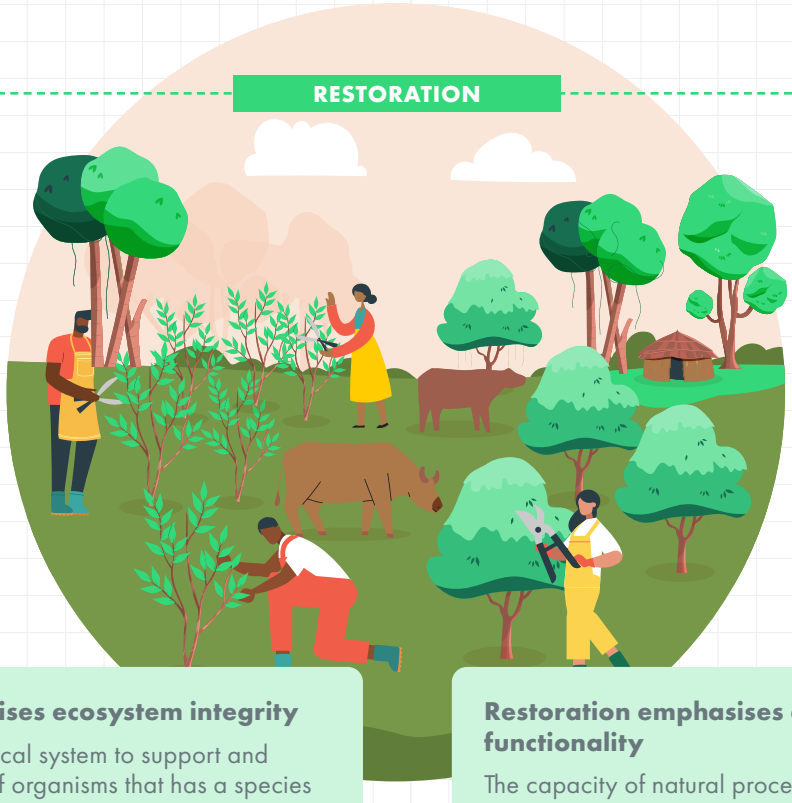
– DR BRUNO OBERLE, DIRECTOR GENERAL OF IUCN[5]

2 Restoration of what?

FLR was conceived because existing restoration approaches were deemed to be too narrowly focused to address and balance **social**, **ecological** and **economic** priorities.[6] Yet, the concept as well as its original definition have faced criticism, largely owing to the ambiguity of the associated terms and definitions which can lead to different interpretations and approaches.[7]

Ecological Restoration

Assisting damaged ecosystems to recover to a previous state before degradation[5]



Functional Restoration

Restoration of the 'functions and structure of an ecosystem'

Restoration emphasises ecosystem integrity

The ability of an ecological system to support and maintain a community of organisms that has a species composition, diversity, and functional organisation comparable to those of natural habitats within a region.[6]

Restoration emphasises ecosystem functionality

The capacity of natural processes and components to provide goods and services that satisfy human needs, either directly or indirectly.[7]

FLR OBJECTIVES

Different objectives of FLR and related terminology can be mapped on a continuum from ecocentric to anthropocentric.[8]

- Biodiversity
- Closed canopy
- Ecological integrity
- Large predators
- Native flora and fauna
- New species
- Species composition
- Wild species

- Avoiding erosion
- Ecological processes
- Ecosystem composition
- Ecosystem function
- Forest
- Interactions between functions and structure
- New genotypes
- Population dynamics
- Resilience
- Structural complexity
- Vegetation cover
- A balance of ecological, social and economic benefits

- Aesthetics
- Cultural and spiritual functions
- Ecosystem services
- High diversity farming system
- Human wellbeing
- Land cultivation
- Productivity
- Provisioning
- Public safety
- Regulatory role
- Stabilization of terrain

FLR IN NUMBERS

3.2 BILLION
global population impacted by land degradation

$2.08 BILLION
investor and company pledges for Initiative 20X20 in Latin America and Caribbean

$9 TRILLION
estimated net benefits from restoring 350 million hectares

2 BILLION HECTARES
estimated degraded land worldwide suitable for forest and landscape restoration

700 MILLION HECTARES
restoration opportunity in Africa alone

160 MILLION HECTARES
land area committed for restoration by more than 50 countries and other entities

100 PER CENT
relevance of restoration to the Sustainable Development Goals, Paris Agreement and Rio Conventions

150 MILLION HECTARES
2020 restoration target of the Bonn Challenge

13-26 GIGATONS
expected greenhouse gases sequestered between 2020 and 2030 under a successful Bonn Challenge

350 MILLION HECTARES

2030 restoration target of the Bonn Challenge, incorporating the New York Declaration on Forests

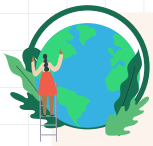
Source: Wolosin, M., 2014. Quantifying Benefits of the New York Declaration on Forests. Data as of May 2018. Carbon sequestration estimate developed by FAO, based on a range of ongoing forest and landscape restoration projects.

3 Key principles of FLR

"A process that aims to regain ecological functionality and enhance human well-being in deforested or degraded landscapes"

– GLOBAL PARTNERSHIP ON FOREST AND LANDSCAPE RESTORATION[10]

FLR brings people together to identify, negotiate and implement practices that should restore an agreed optimal balance of the ecological, social and economic benefits of forests and trees within a broader pattern of land uses.[11]



FOCUS ON LANDSCAPES

FLR takes place within and across entire landscapes, representing mosaics of interacting land uses and management practices under various tenure and governance systems. Ecological, social and economic priorities should be balanced at this scale.[10]

TAILOR TO THE LOCAL CONTEXT USING A VARIETY OF APPROACHES

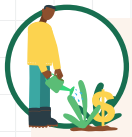
FLR uses a variety of approaches that are adapted to the local social, cultural, economic and ecological values, needs, and landscape history. It draws on latest science and best practice, and traditional and indigenous knowledge, and applies that information in the context of local capacities and existing or new governance structures.[10]

MAINTAIN AND ENHANCE NATURAL ECOSYSTEMS WITH LANDSCAPES

FLR does not lead to the conversion or destruction of natural forests or other ecosystems. It enhances the conservation, recovery and sustainable management of forests and other ecosystems.

MANAGE ADAPTIVELY FOR LONG-TERM RESILIENCE

FLR seeks to enhance the resilience of the landscape and its stakeholders over the medium and long term. Restoration approaches should enhance species and genetic diversity and be adjusted over time to reflect changes in climate and other environmental conditions, knowledge, capacities, stakeholder needs and societal values. As restoration progresses, information from monitoring activities, research, and stakeholder guidance should be integrated into management plans.[5]



RESTORE MULTIPLE FUNCTIONS FOR MULTIPLE BENEFITS

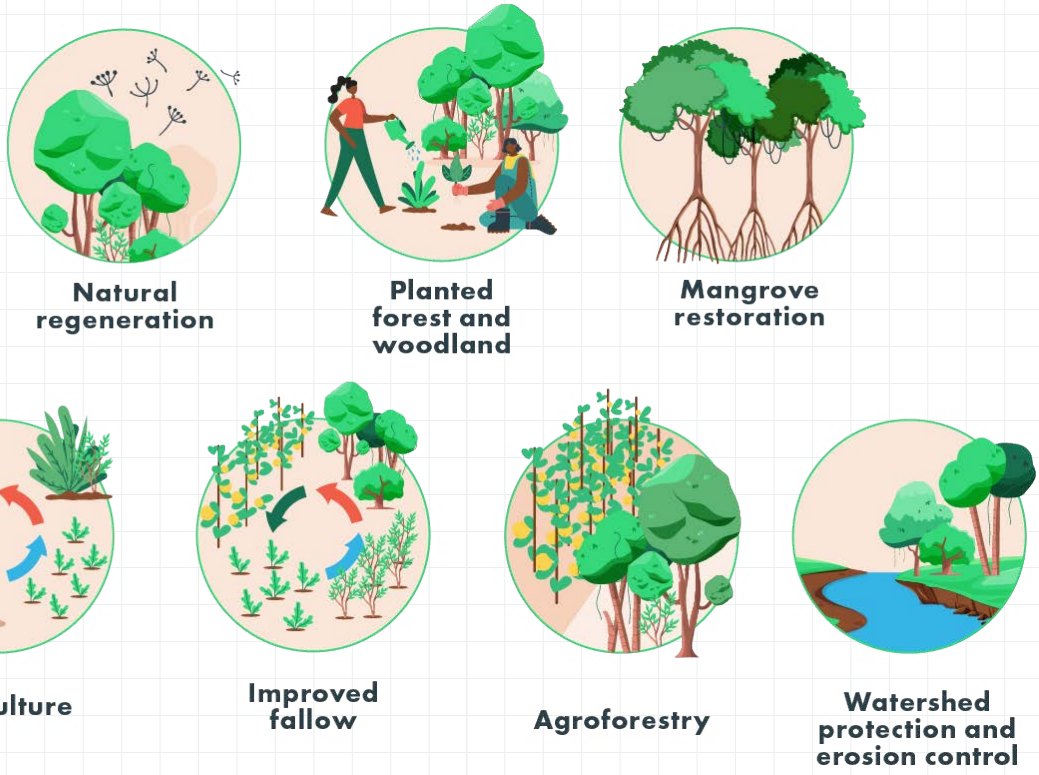
FLR interventions aim to restore multiple ecological, social and economic functions across a landscape and to generate a range of ecosystem goods and services that benefit multiple stakeholder groups.

ENGAGE STAKEHOLDERS AND SUPPORT PARTICIPATORY GOVERNANCE

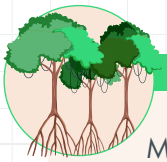
FLR actively engages stakeholders at different scales, including vulnerable groups, in planning and decision making regarding land use, restoration goals and strategies, implementation methods, benefit sharing, monitoring and review processes.[3]

4 FLR intervention types

There are a variety of different approaches, practices, and intervention types for FLR. These are often used in tandem during a restoration programme.[5]



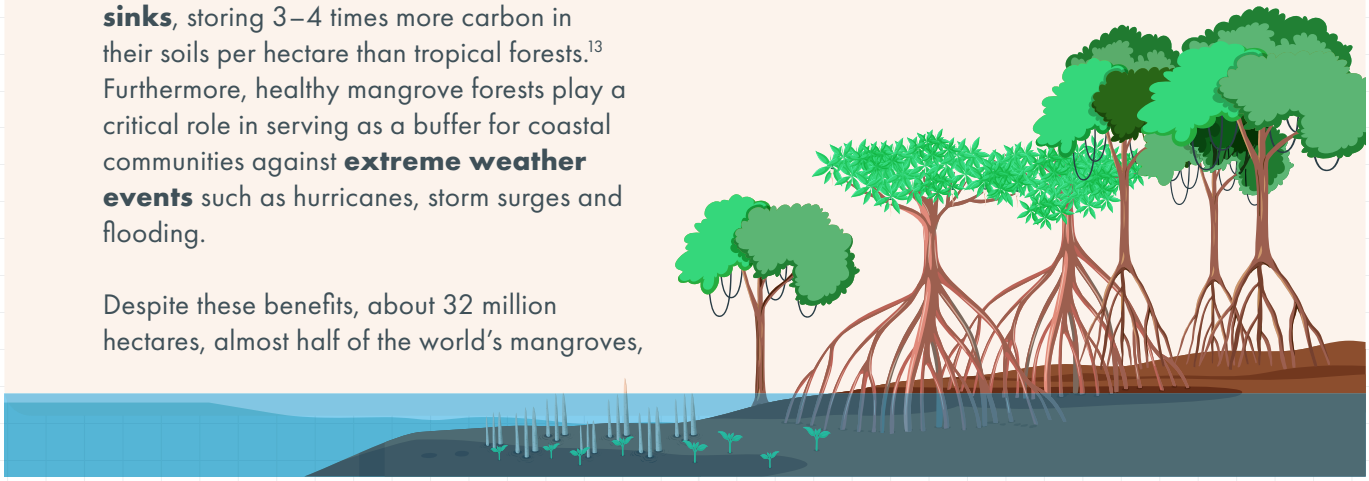
Adapted from: IUCN, 2020. Restore our future.



MANGROVE RESTORATION

Mangroves are **critical coastal ecosystems** that nourish biodiversity, providing **nursery grounds** for many coastal and marine species.[12] Robust mangrove forests stabilise coastline ecosystems to **prevent erosion**. Mangrove forests are also valuable **carbon sinks**, storing 3–4 times more carbon in their soils per hectare than tropical forests.[13] Furthermore, healthy mangrove forests play a critical role in serving as a buffer for coastal communities against **extreme weather events** such as hurricanes, storm surges and flooding.

Despite these benefits, about 32 million hectares, almost half of the world's mangroves, have already been cleared or destroyed and those that remain are under severe threat.[11] Efforts to prevent degradation and restore mangrove ecosystems include the Bonn Challenge, Mangroves for the Future, and the Global Mangrove Alliance.



AGROFORESTRY

Agroforestry is commonly defined as 'agriculture with trees', but it is much more than that. Agroforestry is the **interaction of agriculture and trees**, including the agricultural use of trees. This comprises trees in agricultural landscapes, farming in forests and along forest margins, and tree-crop production such as cocoa, coffee and rubber.[14]

At the landscape level, agroforestry contributes to **ecosystem services** such as soil and water conservation, soil water storage and soil biodiversity, which all play a critical role in enhancing crop production and grazing. Depending on how it is conducted, agroforestry can also contribute to **biodiversity conservation** by promoting a wide range of tree species that form wildlife habitats. The benefits that trees provide are best sustained by integrating them into agricultural landscapes.[14]

Agroforestry **provides rural communities** with:

Fodder for livestock

Fuelwood

Food

Shelter

Income

FARMER MANAGED NATURAL REGENERATION (FMNR)

Farmer Managed Natural Regeneration (FMNR) is a **low-cost land restoration technique** used to combat poverty and hunger amongst farmers by increasing food and timber production and resilience to climate extremes.[15]

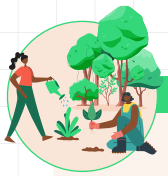
In FMNR systems, farmers prune, protect and manage the growth of trees and shrubs that regenerate naturally in their fields from root stock or from seeds dispersed through animal manure.

Through the restoration of vegetation, FMNR addresses multiple problems simultaneously, such as:

- Land degradation
- Soil infertility & erosion
- Biodiversity loss
- Food insecurity
- Fuelwood
- Building timber
- Fodder shortages
- Dysfunctional hydrological cycles

As FMNR contributes to increasing yields and income, it has a **positive effect on livelihoods, food security, resilience and risk reduction**. FMNR is also an effective climate mitigation and adaptation intervention.[15]

The adoption of FMNR is, however, heavily influenced by **social and governance factors** that are context specific. Some examples include farmers' tree species preferences, land and tree tenure arrangements, and policies and institutions related to grazing.[16]



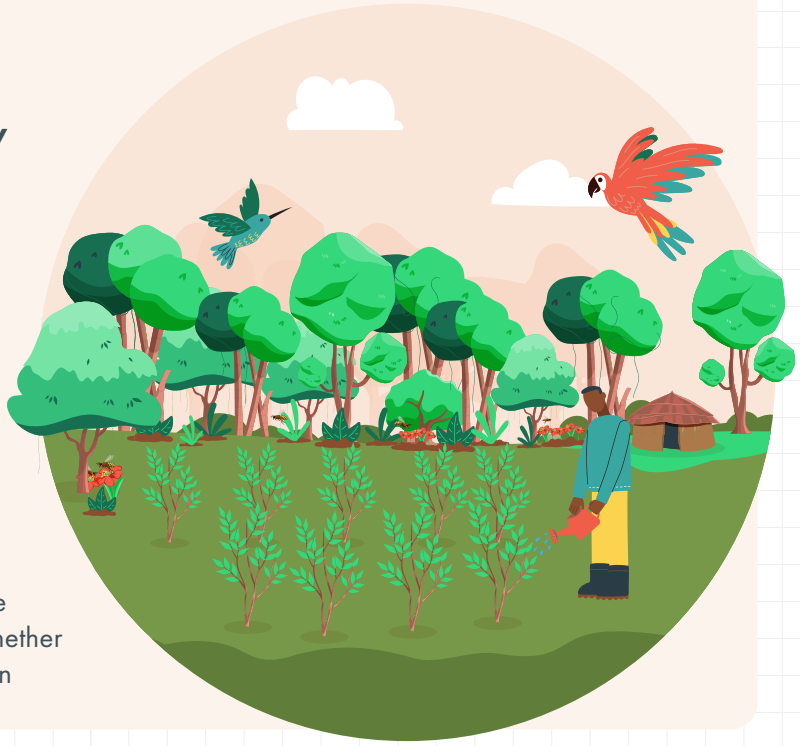
PLANTED FOREST,WOODLOTS AND TREE PLANTATIONS

Harvesting tree products from **plantations** as opposed to natural forest is important for forest conservation.

However, this minimises the economic value of natural forests, which increases their likelihood of being converted to other land uses such as agriculture.[17]

Furthermore, with natural forests generally richer in biodiversity, tree plantations **may not be able to entirely prevent degradation** or protect natural forests from logging, as niche markets would still source timber from certain tree species. However, when this occurs at a relatively small scale compared to commodities such as pulpwood or biomass energy, the sustainable production of timber products from natural forests can be achieved with limited degradation.[17]

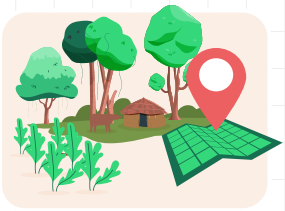
The environmental and social issues associated with large scale plantations are controversial. There is active debate on whether and how 'industrial plantation forestry' can meet environmental and social sustainability goals, given the industry's historical ties to **displacement of local populations** and **poor working conditions** for its employees.[18]



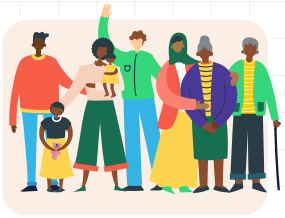
5 Ten principles of landscape approaches

Landscape approaches are at the core of FLR. They seek to **provide tools and concepts** for allocating and managing land to achieve social, economic, and environmental objectives in areas where agriculture, mining and other productive land uses compete with environmental and biodiversity goals. Landscape approaches are based on ten principles that emphasise **adaptive management**, **stakeholder involvement** and **multiple objectives**.[19]

Continual learning and adaptive management



Multiple scales

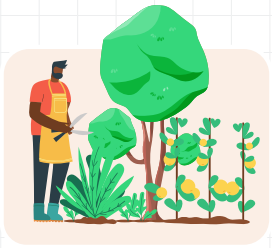


Multiple stakeholders

Clarification of rights and responsibilities

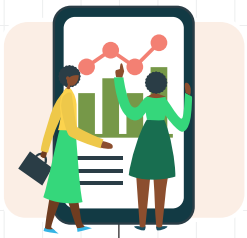
Strengthened stakeholder capacity

Common concern entry point



Multifunctionality

Negotiated and transparent change logic



Participatory and user-friendly monitoring

Resilience

PART **TWO**

Gender and the FLR agenda

1 Linking gender and socio-environmental change

Landscapes both shape and are shaped by various social, economic and cultural practices. Our actions influence biophysical changes in landscapes, which in turn prompt us to change our practices to adapt to the new environment.[20]

Gender roles and relations influence the ways in which women and men **access, use and control** many natural resources, so that different genders may experience environmental changes differently. Gender inequalities influence the opportunities available to different groups of women, men, girls and boys to cope and adapt to a changing environment.

At scale, socially differentiated responses to environmental change can re-shape and transform social and cultural norms and power relations. This can be to the advantage or, often, the disadvantage of those already marginalised. An increasing body of evidence demonstrates that gender-blind restoration efforts are likely to reinforce or even exacerbate pre-existing gender inequalities.[20] For example, such efforts can accentuate women's insecure tenure, disproportionate labour burdens[22], exclusion from decision-making[21] and/or inaccessible benefits.

At the same time, numerous studies have found that addressing gender equality can enhance the **effectiveness and sustainability of restoration action**.[24] For example, gender-inclusive resource user groups have often been found to demonstrate improved environmental outcomes.[25,26] However, progress to date has been modest and **persistent gender gaps remain** in access to productive resources and markets, voice and agency.

KEEP IN MIND

Gender is not only important in the context of environmental degradation, but also in restoration. Gender inequality can jeopardise the efficiency and sustainability of restoration efforts.[20]

KEEP IN MIND

Future policy and project development needs to carefully consider the variation in local-level priorities and contextual factors, including social dynamics, gender roles and norms, influencing the acceptability of restoration options and aim to match measures to suit different types of farmers and communities.[23]

2 Guiding strategies

Structural inequalities, such as in access to information and financing, not only have an adverse impact on women but also on the effectiveness and sustainability of restoration. It is critical for the financial sector to invest in women but also in **transformative change**.[21]

This requires **addressing structural inequalities**. For example, in a multi-country comparative study, women were found to participate far less than men in REDD+ consultations at the local level.[20] When women did participate, they were significantly disadvantaged as they had access to less information than men. This directly impacted the opportunity for effective and meaningful participation from all participants. Approaching gender issues as a tick box process (for example, by only having women quotas in negotiations) does not guarantee that women's concerns are adequately integrated.[22]

3 Synergies between gender equality and FLR agendas

Gender equality and FLR agendas have grown in parallel. In recent years, synergies between the two have been identified and the need to integrate them has been recognised.[27]

The **global restoration agenda** was conceived as a vehicle for advancing national livelihood priorities such as water, food security and rural development, while contributing to the achievement of international climate change, biodiversity and land degradation commitments. This agenda is, in many ways, epitomised by the **Bonn Challenge**, a global effort to bring **150 million hectares of deforested and degraded land into restoration by 2020 and 359 million hectares by 2030**. Many of the commitments pursued under the Bonn Challenge and other initiatives intersect with international commitments to gender equality or include gender equality-related decisions, policies and/or action plans.

The following timeline highlights key developments of these international restoration, gender equality and climate change agendas of relevance to restoration. Included on this timeline are **key areas of overlap**, such as the Bonn Challenge, the UNFCCC Lima Work Programme on Gender and the 2030 Agenda for Sustainable Development. While these high-level policy agendas may guide and/or support FLR efforts, it is often the case that grassroots, community-led FLR work has contributed to and advocated for these policy priorities.

1972

1972 Stockholm Declaration
The United Nations Conference on the Human Environment, held in Stockholm, was the UN's first major conference on international environmental issues, and marked a turning point in the development of international environmental politics. The Stockholm Declaration was the first document in international environmental law to recognise the right to a healthy environment.

1972 World Heritage Convention
Recognises the way in which people interact with nature and the fundamental need to preserve the balance between the two.

1976

1976 Ramsar Convention
Is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

1979

1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)
Is considered the international bill of rights for women. Signatory governments are legally bound to take action to promote and protect the rights of women and to agree to incorporate the principle of gender equality in legislation.

1992

1992 Rio Conventions on Biodiversity, Climate Change and Desertification
Derived directly from the 1992 Earth Summit, the three conventions - CBD, UNFCCC, UNCCD - are intrinsically linked, operating in the same ecosystems and addressing interdependent issues.

1992 Convention on Biological Diversity (CBD): Integrates gender through its Gender Plan of Action (2008), which was updated for the period 2015-2020. The CBD has integrated actions to enhance the monitoring framework and indicator system for gender mainstreaming.

1992 UN Framework Convention on Climate Change (UNFCCC): Established an international environmental treaty to combat dangerous human interference with the climate system. In 2014, the UNFCCC Lima Work Programme was adopted to advance gender equality and integrate gender considerations into the work of implementing the Convention, and later the Paris Agreement, to achieve gender responsive climate policy and action. In 2017, the Gender Action Plan (GAP) was approved to strengthen monitoring and reporting of implementation of gender-related mandates under the UNFCCC Convention.

1994 UN Convention to Combat Desertification (UNCCD): Recognises the importance of women's roles and participation in combating desertification and mitigating the effects of drought. Parties have integrated gender into their decisions and have evolved a Gender Action Plan to accompany the implementation of the UNCCD 2018-2020 strategic framework.

1995

1995 Beijing Declaration and Platform for Action (BPfA)

Includes women and the environment as one of twelve critical areas for action and encourages governments to collect data on the impact of environmental degradation on women, as well as develop gender-sensitive databases. BPfA is considered the most comprehensive set of guidelines for the development of gender statistics at the national, regional and global levels.

2000

2000 Millennium Declaration

Committed nations to a new global partnership to reduce extreme poverty and set out a series of eight time-bound targets, with a deadline of 2015, that became known as the Millennium Development Goals (MDGs).

2006 Mangroves for the Future (MFF)

Promotes an integrated ocean-wide approach to coastal management and to build the resilience of ecosystem-dependent coastal communities. Gender and climate change were introduced as cross-cutting issues in 2006, and property rights and resource tenure, as well as conflict sensitivity, were added in 2014.

2006

2007 UN Declaration on the Rights of Indigenous Peoples (UNDRIP)

Is the most comprehensive international instrument on the rights of Indigenous peoples. It establishes a universal framework of minimum standards for the survival, dignity and well-being of the Indigenous peoples of the world and it elaborates on existing human rights standards and fundamental freedoms.

2007 UNFCCC Bali Action Plan

A proposal on 'reducing emissions from deforestation in developing countries and approaches to stimulate action' (REDD) was first considered by the UNFCCC COP in 2005 and adopted in the Bali Action Plan.

2007

2010 UNFCCC Cancun Agreements

REDD+ stands for countries' efforts to reduce emissions from deforestation and forest degradation, and foster conservation, sustainable management of forests and enhancement of forest carbon stocks. The Cancun Agreements adopted at UNFCCC COP16 include a set of social safeguards for REDD+.

2010 CBD Aichi Biodiversity Targets

The targets aim to support ecosystem resilience and the contribution of biodiversity to enhance carbon stocks through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

2010

2011

RESTORE OUR FUTURE
BONN CHALLENGE

2011 Bonn Challenge

Is a global effort to bring 150 million hectares of deforested and degraded land into restoration by 2020 and 359 million hectares by 2030. The reversal and restoration of deforested and degraded land has been embedded in the Sustainable Development Goals (SDGs), Aichi Biodiversity Targets, Paris Climate Change Agreement, and Land Degradation Neutrality (LDN) goal.

2014 Initiative 20x20

Is a country-led effort to bring 20 million hectares of land in Latin America and the Caribbean into restoration by 2020. This initiative, launched formally at UNFCCC COP 20 in Lima, supports the Bonn Challenge.

2014

2014 New York Declaration on Forests

Is a voluntary and non-binding international declaration to take action to halt global deforestation.

2015

2015 Sendai Framework

The framework calls for stronger women's leadership and participation in disaster risk reduction. This recognition provides a new opportunity to strengthen the capacities of women's organisations and women at regional, national and community levels to shape how disaster risk reduction and climate change adaptation are implemented in the coming 15 years.

2019

2015 African Forest Landscape Restoration Initiative (AFR100)

Is a country-led effort to bring 100 million hectares of land in Africa into restoration by 2030. AFR100 contributes to the Bonn Challenge, the African Resilient Landscapes Initiative (ARLI), the African Union Agenda 2063, the Sustainable Development Goals and other targets.

UN Decade on Ecosystem Restoration 2021-2030

Positions the restoration of ecosystems as a major nature-based solution towards meeting a wide range of global development goals and national priorities.

2015 UNFCCC Paris Agreement

Is a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future. The Paris Agreement builds upon the Convention and unites nations in a common cause to undertake required efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so.

The 2030 Agenda for Sustainable Development

Aims to eradicate poverty while shifting the world toward a sustainable and resilient pathway. Building on considerable progress gained towards meeting the MDGs, the 2030 Agenda and its set of 17 Sustainable Development Goals (SDGs) recognises the need for integrated action to advance gender equality and women's empowerment across all goals.

Some of the key SDGs relative to the gender equality or restoration agendas include:

SDG 5: to "achieve gender equality and empower all women and girls"

- 5.5: Ensure full participation in leadership and decision making
- 5.a: Equal rights to economic resources, property ownership and financial services
- 5.c: Adopt and strengthen policies and enforceable legislation for gender equality

SDG 13: to "take urgent action to combat climate change and its impacts"

- 13.2: Integrate climate change measures into policies and planning
- 13.A: Implement the UNFCCC

SDG 15: to "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss"

- 15.1: Conserve and restore terrestrial and freshwater ecosystems
- 15.2: End deforestation and restore degraded forests
- 15.3: End desertification and restore degraded land

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