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The Key Steps in Implementing Forest Landscape Restoration

A Field Manual to Guide Practitioners in Southwest Ethiopia

Imprint

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ACRONYMS/ABBREVIATIONS

BMZ	German Federal Ministry for Economic Cooperation and Development
BoA	Bureau of Agriculture
CBD	Convention on Biological Diversity
CBNRM	Community-based Natural Resources Management
CBOs	Community-based Organizations
CFM	Collaborative Forest Management
CSOs	Civic society organizations
EWNRA	Ethio-Wetlands Natural Resources Association
FAO	Food and Agriculture Organization of the United Nations
FDRE	The Federal Democratic Republic of Ethiopia
FLR	Forest Landscape Restoration
FLRMA	Forest Landscape Restoration Management Agreement
FLRMC	Forest Landscape Restoration Management Committee
FLRMGs	Forest Landscape Restoration Management Groups
GTP	Growth and Transformation Plan
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
ITTO	International Timber Trade Organization
IUCN	International Union for Conservation of Nature
IUFRO	International Union of Forestry Research Organization
NTFPs	Non Timber Forest Products
NWFP	Non-Wood Forest Product
PFM	Participatory Forest Management
PFRA	Participatory Forest Resource Assessment
REDD+	Reducing Emissions from Deforestation and Forest Degradation
ROAM	Restoration Opportunities Assessment Methodology
SDGs	Sustainable Development Goals
SER	Society for Ecological Restoration
SLMP	Sustainable Land Management Program
SWEPR	South West Ethiopia Peoples' Region
WWF	World-Wide Fund for Nature
WRI	World Resources Institute

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1. BACKGROUND

1.1 INTRODUCTION

The Forest Landscape Restoration (FLR) approach, which is still in its nascent stages of development, is rapidly gaining attention as a more appropriate way to restore degraded forests and other landscapes. Though the term seem refers only to forests, the landscape approach basically includes other land uses and is commonly understood as Forest and other land use restoration or shortly referred to as ‘‘Forest and Landscape Restoration (FLR)’’. Hence, in this guideline FLR refers to restoration of degraded forest and other landscapes. It considers restoration at landscape level regardless of its specific land uses and aims at regaining the ecological functionality of the entire landscape in a mosaic land uses. The great value of this approach is that it integrates forest and other landscape restoration actions with desirable objectives of the landscape, and it is undertaken with the full participation of the people who have a role in the management of the restored areas over a longer period. So, FLR brings together social, environmental and economic considerations in restoring forests and other lands, contrary to just restoring an isolated patch of forest without taking into consideration the people in the area. With people having no stake in the forest, the long-term success of the restoration work is not assured.

The need for restoring forests and other landscapes is increasing in Ethiopia considering the extensive areas of degraded forests and lands. Forest disturbance in its various forms and poor land management practices resulted in vast degraded forests, other land uses and associated loss/decrease of biodiversity, land productivity and ecosystem services. As a result, FLR is currently being promoted to address forest and land degradation problems. FLR approach integrates restoration work with other activities that enhance human wellbeing across the landscape for achieving optimum productivity and social, environmental/ecological and economical sustainability. However, most practitioners are not fully aware of the concept behind the approach. With a view to strengthening and scaling up FLR approaches in Ethiopia, The Nature and Biodiversity Conservation Union Ethiopia (NABU Ethiopia) in partnership with Ethio-Wetlands and Natural Resources Association (EWNRA), financially supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) and with financial and technical backstopping by NABU e.V., are implementing a project called ‘‘*Forests for Future*: Developing forest landscapes for livelihoods and climate adaptation in Southwest Ethiopia’’, specifically in Bench-Sheko, Kafa and Sheka Zones.

As part of this project, NABU Ethiopia and EWNRA developed zonal FLR action plans supported by assessment of status of forest and land degradation, socioeconomic conditions, mapping, identification of suitable range of restoration strategies and the policy and institutional environments which can support the introduction of FLR approaches in Southwest Ethiopia Peoples’ Regional (SWEPR) State. As part of this process the project supported the development of this guideline, which consist of a step-by-step tool, to support FLR practitioners in the region and across the country.

Promoting FLR should be considered as a process, a cycle of working in partnership for planning, implementation, monitoring and learning to continuously improve the practice of FLR and of rural people. Therefore, the guideline is primarily a process-oriented guideline to support situation analysis, planning, implementation, and monitoring FLR. As a result, it attempts to convey what to do and how to do FLR in a more simplified step-wise approach which is easy to be applied at grass-root level by development agents and the communities.

1.1.1 PURPOSE OF THE GUIDELINE

The main purpose of this guideline is to assist FLR practitioners from local communities, government, CBOs, private sector, civil society and academia in guiding across the process of FLR planning, implementation and monitoring. It outlines the key steps of FLR Action Plan preparation and implementation and serves as a starting point for future improvement and design of FLR initiatives in Ethiopia. It is primarily intended to serve grass roots level forestry and natural resource experts/professionals, CSO officers, project coordinators and extension workers who facilitate and support FLR planning and implementation process at landscape level, mainly at zonal, Woreda and Kebele level. It is also helpful to academic institutions to equip their students with FLR related knowledge and to carryout research that improve the process of FLR which will be implemented in different areas of the country with various socio-economic setting and geographic situations.

The guideline is designed in a way it helps the user to make easy and quick reference to specific step and topics in the FLR process. It is categorized in phases, steps and main activities with clear stepwise tools. The main activities have brief descriptions and help boxes adapted from various FLR guidelines, prepared by different international organizations (such as ITTO and IUFRO), and harmonized PFM guideline. It illustrates the process in simplified ways to be adapted/ used by different stakeholders active in FLR implementation taking into consideration their specific environmental factors, technical capacity and socio-economic settings.

In summary, this guideline serves to:

- give an overview of steps and procedures to be followed in FLR implementation;
- identify issues, problems and opportunities to be considered in the FLR approach;
- identify appropriate restoration sites, strategies and livelihood options;
- enable local experts/ foresters and development workers to initiate, implement and monitor the FLR approach in their respective areas;
- assist those interested in working with communities at grass roots levels; and
- encourage people in Ethiopia to engage in and scale up FLR undertakings.

1.1.2 DEFINITION OF TERMINOLOGIES

The terms used here might have different meanings and technical experts tended to refine them to a point where some of them are for very narrow and specific situations. Much confusion prevails as well, even with the most commonly used terms such as rehabilitation, reforestation, restoration and so forth. They have often been used interchangeably, making the environment for discussion rather difficult and sometimes muddling. Hence, it is helpful to include the definitions of terminologies used in this guideline for common understanding while discussing the various processes. Few of the terminologies currently prevailing among technical experts are listed in Annex 1[1].

1.2 FOREST LANDSCAPE RESTORATION

1.2.1. WHAT IS FOREST LANDSCAPE RESTORATION?

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. This 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

[1] Definitions of the terminologies are adapted from Lamb 1994; Siyag 1998; FAO 1998, 2000, 2001, 2002; Gilmour et al. 2000; Lamb and Gilmour 2000; Chokkalingam and De Jong 2001; CBD 2001; ITTO 2002; and Carle and Holmgren 2003.

human well-being in deforested or degraded forest landscapes." Hence, FLR is defined as the long-term process of regaining ecological functionality and enhancing human well-being across deforested or degraded 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." Putting more simply, FLR is about restoring a landscape in a participatory way to enhance human well-being. In 2006, Stewart Maginnis and William Jackson published a handbook known as ''What is FLR and how does it differ from current approaches?''. In their handbook, they 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 adequate monitoring program and appropriate learning process.
- FLR seeks to restore ecological functionality at a landscape scale to maintain biodiversity and ecosystem functions, and strengthen resilience to climate 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.

Thus, FLR is a process that local people, CBOs, government, CSOs, private sectors and other restoration actors can undertake to regain ecological functionality and enhance human wellbeing across deforested or degraded landscapes. FLR involves more than just planting trees. It is about restoring the whole landscape to meet present and future needs and to offer multiple benefits and productive mosaic land uses (including forests and woodlands, pastures, croplands, wetlands and more) over time. Its implementation integrates multi-disciplinary approach and needs to satisfy social, ecological and economic dimensions. It can be implemented at different geographic scale that creates better connectivity; a convenient landscape or across jurisdictional boundaries. However, it is advisable to take into account and decide manageability of the landscape size for effective intervention. For this reason, FLR is best implemented through cross-sector approach that engages multiple ministries and levels of government.

1.2.2 WHY WE PRACTICE FLR?

There are several reasons that call up for the implementation of FLR in Ethiopia. These includes problems of forest disturbance in the form of degradation, perforation, fragmentation and deforestation; soil erosion, land degradation and decline/loss of productivity; loss of habitat and biodiversity/species; sedimentation and soil moisture stress; drought, desertification, scarcity and pollution of water resources; climate change induced impacts such as flooding and drought; wood products supply gap; declining ecosystem services; limited rural livelihood, poverty and resource scarcity. On the other hand, to reverse the problems, there are different conventions and initiatives that the country entered with the international community. All these reasons justify the why we practice and promote FLR, because FLR attempts to address or contribute to address all those problems and attain the various commitments. FLR has the following environmental protection, sustainable livelihoods, climate change resilience and disaster risk reduction, and transparency and accountability benefits:

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

- 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.
- promotes meaningful participation in decision-making by disadvantaged groups, whose voices and opinions are often ignored. This includes poor and landless people, women, youth, marginalized community and ethnic minorities. These groups may become empowered and more acknowledged by other stakeholders as a result of participatory processes, possible for capacity building and improved economic and social returns from their sustainable practices.
- promotes stronger collaboration among landscape stakeholders and brings sectors together to negotiate solutions at the landscape level.
- can contribute to the achievement of the UN Sustainable Development Goals (SDGs), particularly towards SDG1(no poverty), 2(zero hunger), 5(gender equality), 6(clean water and sanitation), 13(climate action) and 15(life on land).

1.3 POLICY AND LEGAL BASIS FOR FLR IMPLEMENTATION

Though there is no specific FLR policy and legal frameworks, other existing policies, legal frameworks, initiatives, adopted conventions and programs in Ethiopia in the different sectors provide reasonable legal basis and backing for the implementation of FLR. These include the principles and intentions contained in the National Constitution, Conservation Strategy and Environment Policy of Ethiopia, the "Forest Development, Conservation and Utilization Policy and Strategy", the "Forest Development, Conservation and Utilization Proclamation of Ethiopia", the 10 years' National forest sector development program, the Ethiopian Bamboo development strategy and action plan and the National REDD+ Investment Program. The ambitious national restoration commitment made to the Bonn challenge, New York Declaration and to the AFR100 Initiative and the subsequent development of 'National Potential and Priority Maps for Tree-based Landscape Restoration in Ethiopia' is another direct government backing to FLR implementation. The revised 2018 forest law constitutes attractive and constructive articles that cover newly emerging activities of REDD+ and PFM which until that period did not have legal expressions. The proclamation, therefore, can be taken as a progressive document which can make a difference if implemented with all earnestness. Regional level similar documents and programs are also available legal frameworks for supporting FLR implementation.

Other important documents that directly or indirectly influence FLR are the Climate Resilient Green Economy Strategy (2011), the National Energy Policy (1994), Rural Development Policy and Strategy (2001), Rural Land Administration and Land Use Proclamation (2005), Sustainable Land Management Program (SLMP), the Guideline for Participatory Forest Management in Ethiopia (2012), and the strategic documents developed by CIFOR and the then Ministry of Environment, Forest and Climate Change in 2015 for scaling up effective forest management practices, management of dry forests and woodlands, agroforestry, smallholder plantations (woodlot) and area exclosures.

The overall policy provisions deeply acknowledge the need for public participation. All those policy and legal provisions recognizes and encourage community participation and ownership on FLR. Moreover, according to the constitution, people have the right to participate in the formulation of policies and projects in relation to any development activity and the government is duty bound to ensure people's participation, specifically women's participation. The recognition of the participatory rights of the people, including women's participation is a leeway for the introduction and application of FLR in the forestry sector of the country.

Although the concept and FLR approach is a recent phenomenon and getting more emphasis from time

to time as one of the viable options for sustainable forest and landscape restoration, there are provisions and established principles in the legal frameworks that allow its application both in state as well as community-owned forests/ forest lands. The forest policy, strategy and proclamation recognizes both the right of participation in management of forest resources, owning forest and benefit sharing of local communities, which are key requirements for FLR implementation. This has the aim of developing a sense of ownership among the people and recognition of their roles in developing, conserving and sustainably utilizing forests and FLR products.

1.4 PRINCIPLES AND GUIDING ELEMENTS OF FLR

The principles, characteristics and guiding elements of FLR presented here have been formulated to assist stakeholders both in the development and monitoring of national policies and legal frameworks aimed at creating enabling conditions for successful FLR implementation and for designing, implementing and monitoring FLR. FLR is not an end in itself but, rather, a means for regaining, improving and maintaining vital ecological and social functions (Besseau et al. 2018). Hence, policies aimed at encouraging FLR should help create resilient and sustainable landscapes in which forests and trees play a major role.

To further characterize FLR, six principles were adopted in 2018 by the Global Partnership on FLR (Besseau et al., 2018). These are:

1) Focus on landscapes (focus to restore the entire landscapes with mosaic land uses).
2) Engage stakeholders and support participatory governance. Actively engage local stakeholders in decisions regarding restoration goals, implementation methods and trade-offs.
3) Restore multiple functions and allow for multiple benefits.
4) Maintain and enhance natural ecosystems within landscapes. Avoid further reduction of natural forest cover.
5) Tailor to the local context using a variety of approaches. Adapt restoration strategies to fit local social, economic and ecological contexts.
6) Adaptively manage for long-term resilience. Be prepared to adjust the restoration strategy over time as environmental conditions, human knowledge and societal values change. For this apply continuous monitoring and learning and make necessary adjustments as the restoration process progresses.

These FLR guiding principles builds on those developed by Besseau et al. 2018 and take into consideration the needs of decision-makers working in the Ethiopian context. Of course, other literatures consider one more additional key principle, which is '*Use a group of strategies*' as one key principle. This refer to the need to consider a wide range of eligible technical strategies for restoring trees/forests on the landscape, ranging from natural regeneration to active tree planting. Some include this under the fifth principle.

The below guiding elements further describe each principle and the conditions needed for successful FLR (Table 1). Together, the principles and guiding elements form a continuum defining FLR as a concept (Figure 1). Note, however, that although a strong effort has been made to encompass all the important aspects of FLR in the guiding elements, they are not exhaustive given the complexity of forest landscapes and the huge diversity of site-specific contexts.

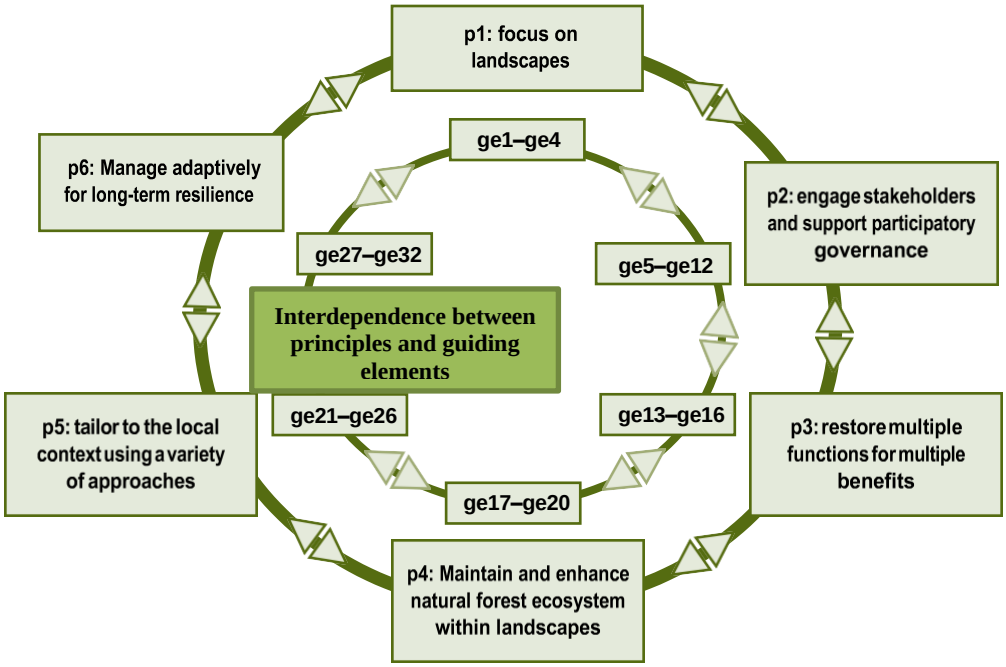


Fig 1: Principles and guiding elements of FLR continuum

Source: International Tropical Timber Organization **(ITTO), 2020**
Note: P = principle; GE = guiding element

Table 1: overview of the six principles and 32 guiding elements of FLR

CODE	DESCRIPTIONS OF PRINCIPLES AND GUIDING ELEMENT
P1	FOCUS ON LANDSCAPES
GE1	Undertake inclusive, gender-responsive landscape-level assessment and land-use planning
GE2	Gain recognition that FLR must transcend sector policies
GE3	Conduct FLR at an appropriate scale
GE4	Address tenure and access rights
P2	ENGAGE STAKEHOLDERS AND SUPPORT PARTICIPATORY GOVERNANCE
GE5	Build adequate governance capacity for decentralized FLR
GE6	Obtain strong stakeholder engagement
GE7	Conduct joint stakeholder analysis of the drivers of degradation
GE8	Strive for social equity and benefit sharing
GE9	Conduct participatory FLR planning, decision-making and monitoring
GE10	Build stakeholder capacity for sharing responsibility for FLR
GE11	Address long-term financing for FLR initiatives
GE12	Establish a favorable investment environment for FLR
P3	RESTORE MULTIPLE FUNCTIONS FOR MULTIPLE BENEFITS
GE13	Generate multiple functions and benefits
GE14	Conserve biodiversity and restore ecological functions
GE15	Improve livelihoods
GE16	Make full use of local knowledge
P4	MAINTAIN AND ENHANCE NATURAL FOREST ECOSYSTEMS WITHIN LANDSCAPES
GE17	Avoid the conversion of natural forests

CODE	DESCRIPTIONS OF PRINCIPLES AND GUIDING ELEMENT
GE18	Restore degraded forests and rehabilitate degraded forest land
GE19	Avoid forest perforation and fragmentation
GE20	Conserve natural grasslands, savannas and wetlands
P5	TAILOR TO THE LOCAL CONTEXT USING A VARIETY OF APPROACHES
GE21	Assess local context and restrictions
GE22	Allow for future changes in conditions
GE23	Tailor FLR interventions to the local context and generate local benefits
GE24	Achieve the financial and economic viability of FLR investments
GE25	Identify opportunities to increase local incomes
GE26	Develop sustainable supply chains
P6	MANAGE ADAPTIVELY FOR LONG-TERM RESILIENCE
GE27	Take an adaptive management approach
GE28	Continually measure the biophysical dimensions of the landscape
GE29	Periodically assess vulnerability to climate change
GE30	Develop participatory monitoring of FLR
GE31	Encourage open access to, and the sharing of, information and knowledge
GE32	Report on FLR outcomes

Note: P = principle; GE = guiding element

In addition to the above principles and guiding elements, successful FLR has the following characteristics.

- A forward-looking and dynamic approach.
- Focus on strengthening the resilience of landscapes.
- Creates future options to adjust and further optimize ecosystem goods and services as societal needs change or new challenges arise.
- Integrates a number of the above-mentioned guiding principles.

2. FLR PLANNING AND IMPLEMENTAION TOOL

In practice, there have been many challenges associated with implementing FLR programs, at least in reconciling the human and ecological dimensions and achieving the scale required. The challenges are in one way or another associated with lack of clear procedures, adoptable tools and effective (insufficient) stakeholder engagement to assist *local level FLR planning and implementation* with a context specific easy to implement step-by-step tool. Several tools have been developed over years to address some of these challenges. The first attempt of outlining a process specifically for FLR was published by Vallauri et al (2005). The intention of this framework was to provide indicative steps to planning and implementation of restoration initiatives.

Another attempt of defining FLR opportunities was presented by IUCN and WRI in a 'World of Opportunity' map in 2011. In 2014, IUCN and WRI joined forces to develop the Restoration Opportunities Assessment Methodology (ROAM) (IUCN and WRI, 2014). This methodology has widespread use and application that has an important influence on the way FLR ends up by being implemented (or not) in different contexts. The methodology is aimed at defining and

prioritizing opportunities and the course of action for FLR mainly at national or sub-national context (i.e. the visioning and conceptualizing phases of Stanturf et al, 2017 and Stanturf et al, 2019) based on an analysis of social, ecological and economic dimensions.

In 2017, scientists from IUFRO collaborated on the development of guidelines for local level FLR implementation (Stanturf et al,2017 and Stanturf et al, 2019) that illustrated FLR project cycle management splitting into four phases: visioning, conceptualizing, acting and sustaining. Vallauri et al. (2005) demonstrate similar basic steps in FLR, from a theoretical design, through to implementation (via pilot projects at times) and adaptive management based on feedback loops. The ROAM process provides more detail on the first phase related to the design of an FLR programme, especially at the national and sub-national level. In practice, this guidance has been also used for relatively small-scale projects like in Ethiopia.

Many other tools exist that are associated with ecological restoration (ITTO, 2002; SERI, 2004), forest rehabilitation or specific elements of the overall restoration process (Stanturf et al, 2019). Other planning frameworks have since been developed (Hanson C. et al, 2014; ITTO. 2020). For the purpose of this FLR planning and implementation guideline and step-by-step tool the guidelines that was designed by ITTO in 2020, Stanturf et al, 2019 and Stanturf et al, 2017 were used to serve as a base.

As FLR is a long-term process of regaining ecological functionality and enhancing human wellbeing across deforested and degraded landscapes, its interventions shall be carefully identified and designed through consultations with regional and local governments; local communities and other key stakeholders. A step-wise and iterative process should be carried out to account for the national and local contexts and sustainable development objectives, to assess and prioritize potential restoration and livelihood improvement opportunities, and to scale up FLR. In addition, the environmental safeguard requirements of both the Government of Ethiopia and the FLR donors should be addressed through an Environmental and Social Management Framework (ESMF). However, reference to the ESMF, documents prepared for Sustainable land management Program and REDD+ would be satisfactory instead of formulating a new one for FLR. Thus, considering Strategic Environmental and Social Assessment (SESA) formulated for REDD+ and Environmental and social impact assessment guidelines and directives might also be necessary.

FLR is considered as one viable option for sustainable forest resource management, climate protection, biodiversity conservation and rural livelihood improvement with active involvement of the user communities at all phases/stages, i.e. visioning, conceptualization, planning, implementation, monitoring, evaluation and sustaining FLR. This FLR planning and implementation tool is designed to comprises four phases, where for each phase few steps are outlined with some points for practitioners to consider.

The operational framework customized (adopted and developed) for this guideline and tool is presented in figure 2 below. Accordingly, the following **four major phases** are proposed to apply FLR in step wise process.

Phase 1: Visioning —this phase sets the goals, the purpose towards which an FLR project is directed. Visioning implies what a restored forest landscape will look like in a given context

(country or landscape). It is an initial FLR idea generation step to craft the landscape transformation goal. In this phase, together with stakeholder consultation and a comprehensive situation analysis, describe expected long-term outcomes of FLR.

Phase 2: Conceptualizing and Designing (Planning)—This is objectives setting and actual detail planning or landscape transformation designing phase. This phase translates the overall objectives into concrete, actionable and measurable activities (with verifiable indicators) that will result in accomplishments or meet targets. It provides concrete mid- to short-term targets, priorities, and social and ecological objectives. It involves identification and prioritization of potential measures that address the problems of deforested and degraded landscapes, climate, community, biodiversity, etc. This phase provides a sequenced list of what will be done, where, when, by whom and at what cost. It determines baselines and indicators of progress, and enabling environment implementers to identify whether they are heading towards a successful outcome or not.

Phase 3: Implementation— The implementation phase involves putting the FLR action plan/activities into action. It involves the process of putting a project plan into action to produce the deliverables, otherwise known as the products or services, for beneficiaries or target areas. It is the process of turning formal plans — often very detailed conceptual plans that will affect many — into reality. This phase involves the implementation of a wide range of basic types of FLR operations including familiarization of the project, input supply, applying active and/or passive restoration measures, etc. Besides describing practical technical tools useful for restoration, emphasis is given to the specific local context in which suitable methods of FLR operations will successfully restore degraded landscapes.

Phase 4: Sustaining—this phase gives due attention to the long-term results, highlights planned interventions over time following a management plan (including managing restoration), using monitoring and adaptive management that enables feedback loops. So that changes to the plan may take place, as necessary, based on subsequent developments. It involves coordinating resources, measuring performance and managing knowledge to ensure the project remains within its expected scope and budget. It also involves handling any unforeseen issues in a way that keeps a project running smoothly.

Figure 2 below depicts the summary of FLR's suggested eight steps of planning, implementation and monitoring landscape interventions, within the abovementioned four-phases. Note that the operational framework presented therein is not designed to perfectly place all possible interventions into the four phases. The nature of FLR project-cycle management includes a feedback loops that exist to enable adjustments (to take adaptive management) to be made in light of dynamism, experience, evidences and future societal needs. Readers should bear in mind that the steps and activities are not exhaustive enough and may not encompass all aspects of FLR in all situations. However, still it illustrates the basic aspects and processes in implementing FLR measures.

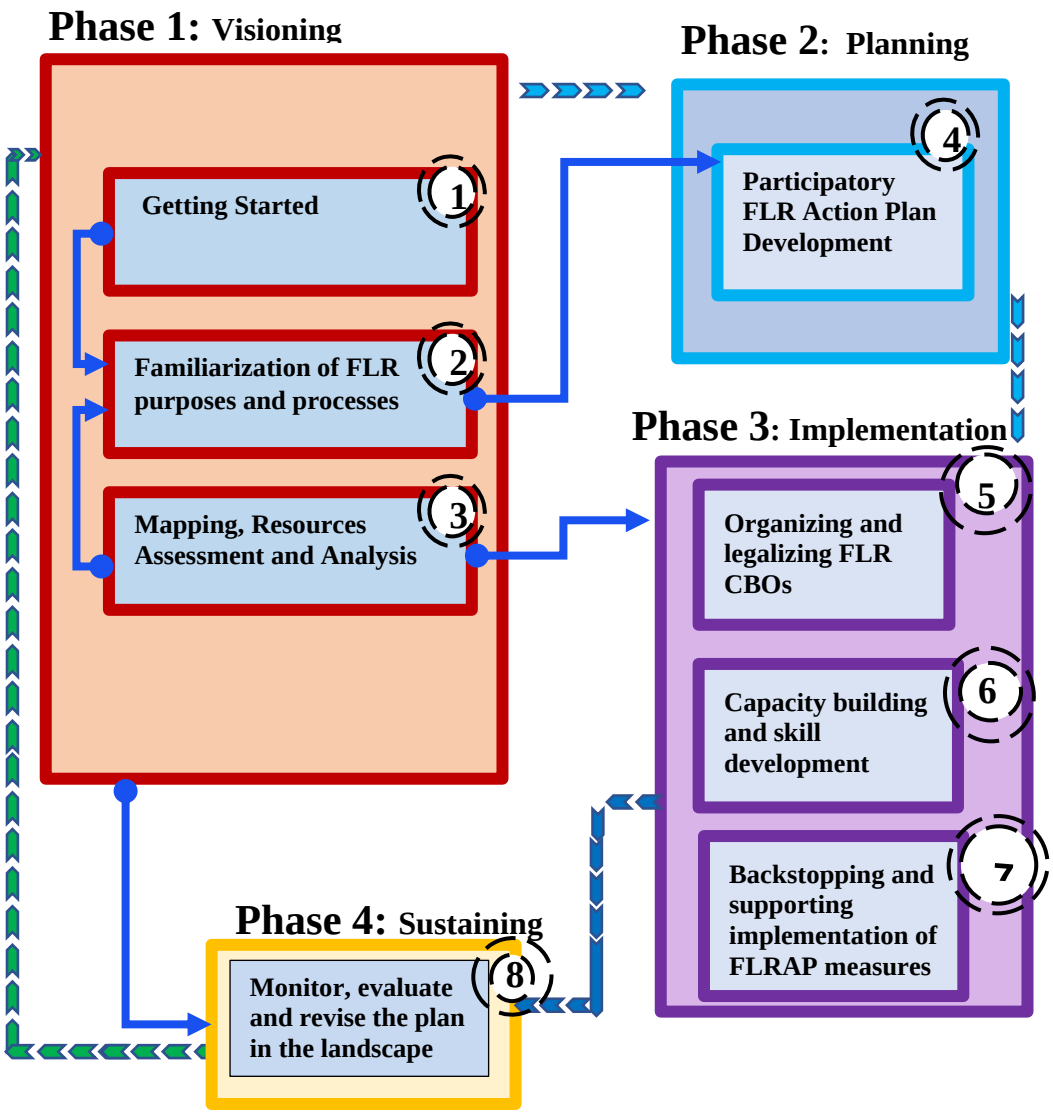


Fig 2. Phases and Steps of FLR, flow chart of sequential activities
(Source: adapted from ITTO, 2020)

2.1 VISIONING

STEP 1: GETTING STARTED

Main Tasks

1. **Selection of intervention landscape**: There could be a number of options for choosing an intervention landscape. These includes use of *secondary data* (e.g. existing degradation maps, LULC[2] maps, etc), *primary source* (consultation with relevant local administration like forestry/agriculture institutions), use of *own experience* of the landscape or/and a *combination* of either/all of the sources when available. In some cases, Woreda forestry/agriculture offices might have plans to undertake FLR and has already pre-selected tentative sites or concerned stakeholders

[2] LULC stands for land use land cover.

might have heard about an FLR undertaking nearby and requested the Woreda/Kebele experts to work in their respective area. Sometime, potential landscapes/sites that allow to implement the range of restoration strategies might be already known by local governments. Such potential sites include ranging from severely degraded to moderately degraded forest lands, afforestation/reforestation areas, fragmented forest patches that needs to be connected using corridor establishment, forest boundaries, woodlot establishment sites, degraded watersheds, agricultural lands suitable for certain agroforestry systems/practices, road sides and river sides.

Help box 1: Tips for choosing FLR sites

When choosing the site for FLR, criteria to consider would be to look into factors that favor FLR and better create socio-ecological connectivity. This includes ecological factors, social contexts, and political and institutional setups. In general, for beginner FLR practitioners it is good to start from sites that favor FLR and gain experience. Then gradually move to landscapes with the difficult social and environmental situations for restoration. Considerations for selecting the site within the Woreda include:

Ecological factors: Does the landscape has natural potential for restoring vegetation like edaphic factors and climatic conditions? Historically, was there vegetation in the landscape before, if already no vegetation exists currently? For example, how the forest condition looks like? Is there forest disturbance? Is this disturbance (degradation, deforestation, fragmentation, perforation) still continuing? Do the local communities depend on the forest/NTFP for their livelihood? Is there a potential livelihood benefit for the community? Is there a shortage in the supply of forest products? Is there ecosystem services and habitats that need improvement to better function through creating connectivity? Is the size of the landscape manageable for intervention? If the answer to these questions are YES, then it is most likely easy to start FLR.

The people or social context: Do villagers have experience of cooperation among themselves and with the forestry/ natural resources/agriculture offices? Are the communities with no known serious conflicts or are there divisions within the community? Is there evidence of a positive attitude towards natural resource conservation; existing indigenous resources management system; appropriate balance between the size of the resources and the apparent user community; manageable community size for field work and FLR arrangements?

Local politics and institutions: Is there a tradition of more positive relationships than conflicts between the local institutions, among community institutions and among government institutions? Is the local administration concerned with land/forest degradation and willing to support community participation? Is there evidence of good governance? How the commitment of the local government looks like? etc.

2. Identify FLR stakeholders in a specific landscape and form FLR implementation team

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 to guide this. These are based on the work of Stanturf et al. 2017.

- 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?
- 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?
- Who is deciding on FLR interventions?

It is 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. The process of prioritizing stakeholders for engagement is highly contextual. Identifying primary and secondary stakeholders and defining community groups are important to know level of their engagement. The purpose is to

identify the main stakeholders and define them as either primary[3] or secondary[4] stakeholders in terms of their influence and importance in the implementation of FLR. This process will lead to agreements as to which community groups /stakeholders should become partners in restoration program. For example, community members who used to reside in the area but have currently left though still maintaining traditional right to utilize NTFPs such as forest coffee could be considered as secondary stakeholders. The primary stakeholders would determine the process owing to their importance to the process and their capacity to influence the outcomes of the restoration practice. Once the primary stakeholders are identified, the process would be finalized with the establishment of a multidisciplinary planning and implementation team (PIT) as indicated below. Here it should be noted that in the case of FLR, government departments are *key stakeholders* who are critically important and significantly influence the outcome of the process and should not be confused with primary stakeholders.

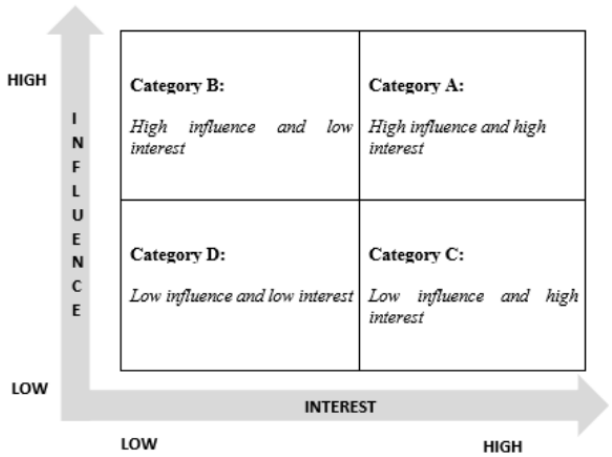
Help box 2: Stakeholder analysis using power and interest table/matrix

Ask the group to list the whole stakeholders and agree on their power and interest by scoring for each stakeholder, allowing sufficient time for discussion. To score each stakeholder, use a five-point scale where 1 = very little interest or power to 5 = very great interest or power.

Table of influence and importance

Stakeholder	**Power/ Influence**	**Interest/ Importance**
Women group		
Youth group		
Elders		
Kebele leaders		
Traditional healers		
Disadvantaged/marginalized groups		
Fuel wood sellers …		
Etc…		
High Power (influence)	**High Interest (Importance)**	
AB	AC	
CD	BD	
Low Power (influence)	**Low Interest (Importance)**	

The matrix below gives the relative locations of the various stakeholders, included in Boxes A, B, C and D to classify your stakeholders in FLR.



[3] ***Primary stakeholder***s are those who are living in and around the selected restoration sites and are most affected by the outcome of FLR planning process.
[4] ***Secondary stakeholders*** are mostly not living in the area and are indirectly or less affected by the outcome of the planning process.

As the interests, roles and influence of stakeholders do change over time, frequent reviews and updates are essential. 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. In some cases, such stakeholders and implementation team might have been already established, like in the case of PFM CBOs[5] in the Southwest forest contexts. In such case strengthening or adapting already established stakeholders might be preferable to use them as entry point for FLR intervention than duplicating efforts.

Ensuring that stakeholder groups are balanced and representative is important. It is also challenging that 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/disadvantaged people who are mainly dependent on natural resources 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. Once you identify appropriate stakeholders, form the FLR implementation team (i.e, PIT) and assign local (Woreda) level FLR focal person(s) from relevant government institutions who would coordinate/facilitate all FLR activities within the Woreda. Consider to form a multi-disciplinary FLR implementation team and in some cases which might be composed of different institutions such as the Office of Forestry, Agriculture, Water Resource Management, etc.

3. **Orient stakeholders:** The success of FLR implementation depends on the commitment of the stakeholders involved and particularly the support from Woreda officials is crucial. For this reason, it is essential to undertake briefing with all stakeholders; Woreda council members, Kebele officials, local leaders, elders, CBOs and influential and concerned individuals representing the community. The briefing meeting should start at Woreda/landscape level and continue meeting lower-level administrative bodies in the presence of Woreda representatives as a gesture of support. At all levels it is important to carry out historical landscape situation trend analysis and then introduce FLR using brochure or leaflets.

Help Box 3: Historical Forest and Landscape Condition Trend Analysis. It is an important tool to discuss and understand the past, present and future landscape and other situations. It opens up discussion on how to reverse the current condition. For example, use below trend analysis to understand forest condition and its implication.

Time	Extent of Forest	Level of forest disturbance	Forest product availability/ Income from forest	Climate condition e.g., rainfall pattern, Water availability
Present	XX	XXXXXXXX	XXX	XX
30 years ago	XXXXXXX	XXXXX	XXXXXXXXXX	XXXXXXXX
60 years ago	XXXXXXXXXXX	XXX	XXXXXXXXXXXXXXXX	XXXXXXX XXXXXXXXXX

[5] PFM CBOs or CBOs can be established in the form of cooperatives or association or any other form.

This orientation helps to create shared motivation, common understanding and vision for the restored landscape.

4. **Meet and brief Kebele leadership, CBOs leaders and DAs[6]:** The objective of this meeting is to develop a good relationship with the Kebele level administration. Having a good relationship is a fundamental prerequisite for the success of a participatory process and can only be attained through honest interaction using formal and informal discussions between development facilitators and their partners. Note that relationship building is a process and all your interactions with partners need to be towards building supportive and good working environment. With this objective in mind, meet with Kebele administration/council, CBOs and DAs to confirm their interest in FLR. Introduce the basic concepts of FLR using FLR flow charts and discuss on issues of landscape restoration and sustainable forest management in their locality and underline that the way forwards are to work in partnership where their involvement is fundamentally important.
5. **Meet and brief Kebele community members and/or CBO members:** Meet the community groups of three or two *"Goth"* in one meeting and if they have traditions of having Kebele level general assemblies, conduct a similar meeting if possible. The objective of the meeting is to discuss natural resource (forest) management issues, create awareness on FLR, and agree on the need for having a working mechanism such as establishing Kebele level Planning and Implementation Committee (PIC). The outcome of the meeting would be to reach on consensus about doing FLR in their locality and decide on the smallest unit of FLR community as a starting point. Finally, if possible, demonstrate FLR process (film, poster) to create common vision.

Help Box 4: Tips on how to conduct better community meetings

- Arrange the meeting (at a convenient time and place) and inform participants in advance. Stay overnight, if necessary, and hold meetings the next day when people have time to attend.
- Make sure that all relevant persons (women, youth, disadvantaged people, etc) are able to attend the meeting.
- Promote the best possible communication among the participants by explaining or re-phrasing points, asking questions, summarizing answers, suggesting the exploration of new ideas, possible solutions or explanations.
- Make sure that men in the village understand your motives for your need to talk to women (if you are a male facilitator).
- As a guiding principle
    - Do not lecture.
    - Appreciate their ideas and feedback.
    - Allow them to share their experience.
    - Consider their background and experience.
    - Understand their language and terminology.

Note that in a participatory process there is not only one way of doing things but there are a number of ways of doing the same thing. However, using experience sharing visits, when possible, and template documents could speed up the process.

Help box 5: Tips on how to speed up the process

- Before starting visioning phase undertake a proper planning of logistics, technical inputs and materials needed for the process.
- While planning the process thoroughly review the seasonal calendar to see availability of time and interest for the work from the community side.
- Carefully check the timing is suitable and goes along with other critical government development programs.
- Note that the time required for each activity in the process depends on a host of factors including the topic, interest of the participants, knowledge on the topic, depth/importance of the issue and facilitation skill.

[6] DAs refer to Development Agents who works for the agriculture sector at grassroots (Kebele) level.

STEP 2: FAMILIARIZATION OF FLR PURPOSES AND PROCESSES

Main tasks

1. **Identify natural resource (forest) uses, users and gender issues:** As a continuation of stakeholder analysis, team establishment and briefings it is important to divide the community into different *interest groups* depending on gender, wealth, age and individual preferences of natural resource (forest) uses. In particular, it is important to carry out analysis of gender roles, labor, power, decision making, access to and control over the resources, forest use, etc. as well as analyses of constraints to women and youth participation in FLR process and develop strategies to overcome these constraints to ensure their active participation in implementation. The strategies developed to overcome gender disparities could be applied to other groups as appropriate (e.g., poor men, landless youth, etc.).

Help box 6: Tips on gender analysis /Addressing gender issues

The objective is to fully involve women and youth in FLR processes right from the beginning to make sure they are able to contribute to FLR success and benefit from it through integrating gender issues into the FLR plan and agreements. Therefore, the first step is to create gender awareness and identify factors that create inequalities among men and women, youth, marginalized groups, etc in their socialization.

Summarize why those boys and girls are expected to behave differently because of their gender and socialized culture. Analyze roles, access to and control, decision making etc, with respect to natural resources including forests: Who does what in the forest? Who uses what from the forest? How much time is spent by each of the gender groups? Who controls forest and other resources in the area?

Summarize the impact of these differences on current gender imbalanced situation which include: lower status of women, low representation of women in development activities, limited access and control of resources, limited decision-making power of women etc. Ask what would be the benefits for men and women if the current condition of women is improved. Consider a process that improves the involvement of women in all aspects of FLR, including decision making. Then, use the information to develop appropriate intervention plan for different roles they play in the society.

2. **Introductory FLR training to Woreda level FLR facilitation team:** The purpose of FLR training is to raise awareness on restoration, its concept and principles and provide introductory training to Woreda facilitators (PIT) and DAs to help them initiate and lead FLR planning process. It is mainly to create shared motivation, common vision and understanding on FLR and for the restored landscape. The main learning is expected to be gained from actual doing and learning through the process. Therefore, trainees are not expected to grasp everything about FLR during the first training but this will able them to initiate FLR in their locality. The training should start with adequate preparation of materials and logistics. The training materials should be ready in advance and good to include the training manual, FLR brochures and case studies.

   The training should include the following contents for better understanding and success:

   - Introduction
   - Definition and objectives of FLR
   - Why FLR is needed for sustainable forest management and natural resources conservation
   - FLR developments (Global, Africa and Ethiopia)
   - Benefits of FLR; environmental, economic, social, cultural and political
   - Principles of FLR and success factors

- Possible challenges in FLR implementation
- Lessons learned from FLR implementation in Ethiopia
- FLR process (the 8 steps of FLR process indicated in this tool)
- What needs to be done in their locality to initiate FLR?

3. **Introductory FLR training to community level planning committee:** The aim of this community level training is to raise awareness; introduce the concepts, principles and process of FLR; and to establish shared motivation, common vision and understanding for the restored landscape. So that the planning committee (PIC) knows what they are going to achieve through the process. The training will start with a general introduction to FLR, (use of FLR brochures and flowchart).

Help box 7: Introduction to FLR

Have a proper introduction and use guiding principles in Help box 4. Using Scan method* ask participants their understanding about participation and experience of participation in social, environmental and economic activity that are initiated by the community themselves. Make sure that the experience mentioned includes working together, helping each other, sharing responsibilities and benefits (e.g. in the case of PFM, integrated watershed management), participation in social institutions and activities (social events and farm activities like '*Edir', 'Ekub'*, '*Kire'*, '*Debo', 'Wonfel*', etc), etc. For example, use scan method to ask the participants to assess forest condition 40 years ago. To know: a) dense forest coverage in the past, b) abundance of forest products, c) abundance of wild animals, d) what were the several benefits their community was getting from forest e.g., forage for livestock fuel wood and construction wood, household income, food obtained from wild animals/edible fruits, environmental benefits etc. Scan also to get current forest condition by forwarding the questions: - How is the current forest condition? What are the benefits you are getting from it now? Identify whether there is scarcity of resources and lack or shortage of the benefits from forests.

Using Buzz group (*small groups of 3-4 people formed to discuss a topic for a short period to develop a specific task*) discussion ask participants to list the possible causes of forest disturbances (degradation, fragmentation, perforation, deforestation, mismanagement) and make sure that at least the following causes are mentioned: population pressure, lack of proper forest management by the government/community, the forest has no owner (the property of the common) so it is not managed, corruption, everybody wants to use the forest and etc. Using community discussion, ask the participants who will be the most affected due to such disturbances and how? Make sure that the answer is that it is the community living in and around the forest that are most affected by losing benefits from the forest.

Present FLR case study (ies) and video show and ask participants if they are interested to follow the same process. Finalize the process by concluding with ''***We need to involve in FLR action planning and implementation to improve our livelihoods and sustainably manage natural resources***." Note: Throughout the process the planning committee is advised to consult and communicate with community members through informal discussions on issues of FLR and training they received until they handover the process to the legally established community institution.

* Scanning is a technic to trigger and extract key information and ideas such as names, numbers, specific facts. Scan method is a quick assessment to find out specific information without details in order to have get a glimpse look.

STEP 3: MAPPING AND PARTICIPATORY LANDSCAPE RESOURCE ASSESSMENT

Main Tasks

1. Developing and/or Collecting Maps

This section describes the need to collect best available spatial information to be used in the planning and monitoring process. Spatial information effectively assists planning process (next phase) by providing information regarding spatial distribution of potential areas for restoration and to demarcate its extent for setting targets per range of restoration strategy/option. Note that map availability will strongly depend on the location, size and landscape objectives of interest. Various maps are available either in the form of digital data, printed maps (printable, JPEG format) or both from different sources.

We therefore limit our suggestions in this section to map types and sources that are generally applicable and reliable for use across selected zones or landscapes. The other important point is consideration of time of maps produced to avoid relying on outdated maps. As much as possible use latest maps that allow you to better understand the current condition of the landscape and natural resource status as dynamism always exist.

Application of maps in FLR planning depends on the availability and type of maps and capacity (technical and financial) of implementing organization. The most appropriate approach to take will depend on the quantity and types of data available. If sufficient amount of GIS data are readily available and permission to use these data sets has been obtained, the assessment team will be able to conduct a large part of the spatial analysis using a 'digital mapping[7]' approach. On the other hand, if only a limited amount of GIS data is available for use, the team will need to use more of a 'knowledge mapping[8]' approach. Both approaches have their strengths and weaknesses – digital mapping can be too precise and risks ignoring local realities if the biophysical data indicate that a restoration option is possible, while knowledge mapping captures a richness of undocumented local and technical insights but is not very specific when it comes to landscape-level biophysical constraints. For this reason, assessment teams may prefer to use a combination of these two approaches.

In summary, use GIS software to produce, add all spatial features, display and analyze the landscape to generate relevant information or data for addressing the identified main issues in the planning and monitoring processes. This is when there is readily available digital data or have the capacity to produce own maps. On the other hand, if such data and capacity are not available, use printed maps and/or knowledge mapping. Though the required type of spatial data depends on the specific mapping criteria used for restoration types, the following types of maps are commonly helpful for FLR planning:

- Administrative map;
- Topographic map;
- Population density map;
- Land use/land cover map;
- Biodiversity/ protected area map/ vegetation map;
- Soil map;
- Rainfall and temperature maps; and
- Landscape restoration potential maps (land suitability for restoration).

Selecting adequate data sources and making maps is a time-consuming effort. Hence, plan for enough time to define relevant spatial data needs, search for maps, assess the usefulness of selected maps and (re-) produce maps. In general,

- Maps specifically produced for the area of interest are likely to be more accurate, compared to globally or nationally available maps, and are therefore preferred.
- Use local expertise to judge if the year and spatial detail of the maps are adequate to address the key issues in the landscape. Often a compromise is needed between the two.
- Maps in a GIS or digital format are preferred as these can be tailored towards the planning and monitoring needs. Printing facilities are needed.
- Specific maps that show results from earlier studies (e.g., mapped erosion risk, yield estimates or carbon

[7] Digital mapping is the classic GIS approach that builds up a spatial picture by combining layers of digital information and developing algorithms to test and visualize specific options, such as "target contour planting with agroforestry species on slopes greater than 5% on existing agricultural land".
[8] Knowledge mapping, as the name suggests, deploys local knowledge and involves a crowd-sourcing approach or community resource mapping, whereby different stakeholders transfer this knowledge (and challenge each other's ideas) onto a base map. Once stakeholders agree that this represents their best collective knowledge it can be digitized and used for further analysis.

stock) could be collected too. Make sure that not only the year and resolution are adequate, but also the underlying data and models of the area of interest are valid.

2. Field Data Collection and Analysis (Landscape resource assessment)

The purpose of conducting participatory landscape resource assessment (PLRA) is to gather baseline information necessary for preparing the FLR Action Plan (FLRAP) and future progress/status monitoring of the impact of interventions by restoration actors (communities, government organizations and other actors).

As a tool this task provides the actors with a detailed knowledge of the resource status across the landscape at the time of the assessment. This can be used to determine any changes desired to happen in the resource over time (by repeating the assessment for monitoring purposes), and observing whether the changes are as intended or not as per the restoration plan. If not, then changes need to be made either to the intervention type or detailed prescriptions or to the implementation method. This entails taking adaptive management to bring the required changes overtime. Field data collection for FLR planning can be conducted using participatory forest resource assessment (PFRA), transect walk and participatory rural appraisal (PRA) methods. For details of applying each of these method refer to NABU's FLR training manual prepared for FLR implementation in the Southwest Ethiopia (NABU, 2021).

The PLRA has four major steps:

a) **Preparation**: Organize introductory session with the planning team and some additional PIC members to have a briefing and discussion on the purpose of PLRA. The process involves informing what kind of information, why and how it is gathered and analyzed, who should be part of the team from the community, when the PLRA will be conducted, formation of the team, materials required and logistic arrangement for the assessment (e.g. map of the landscape such as forest, agricultural lands, biosphere reserves, settlement areas, etc. and equipment); and decide on the number of sample plots you would like to have for conducting PFRA.

b) **Conducting the PLRA**

c) **Analysis, summarizing and reporting the PLRA results**.

d) **Discussion on intervention/management implications of the assessment results:** this includes discussing what was learnt from the exercise and suggesting FLR measures, management actions regarding for example forest development, forest utilization and forest protection aspects.

The forest resource assessment, which is part of PLRA, can be done on a sample plot basis after stratifying the forest. In order to set out plots and transect line, observe the topography and map of the landscape and design the transect line direction along the longer border of the site/ landscape. The first plot can be set using a random number from your scientific calculator. Set the distance from border and then between intervals of for example100 m. If the area is large and/or the forest is more or less homogenous the interval between plots will also be higher. Once the first plot is determined start the participatory forest resource assessment (PFRA) using PFRA plot assessment form. This form can be found from the 'compiled filed data collection templates for the FAP preparation' as part of NABU's Training of Trainers manual on FLR on *Annex 2.1 and 2.2*. Then after, the summary reporting, *found in Annex 2.3 of the same training manual,* should be done immediately after the field assessment is completed.

When assessing at each plot, remember that the main purpose of PFRA is to gather information for FLRAP preparation and thus encourage discussion on the management implications under each category of information gathered which would later be compiled as management prescription/ FLR measures. For example, if the exposure of the soil is high it means that plot area might be overgrazed, over utilized, unmanaged and this gives indications for appropriate restoration measures/ management prescriptions. Having such reflection on each plot will ease the work under each FLR intervention measures/ forest management prescription section.

Note: *While facilitating remember that adults do not want to be told what to think. So respect them as adults. However, still you can forward ideas to encourage them generate their own ideas while respecting them. The following table can be used as a guide to discuss management strategy in relation to community needs and the forest condition.*

Table 2. Guide for setting future management strategy

Community need	**Forest Condition**			
	Good	Moderate	Poor	Degraded
Wood for local use	Sustainable selective utilization		Improved management of natural regeneration and enrichment planting	
Environmental protection	Protection of the forests			
Forest based improved livelihoods	Sustainable forest management		Reforestation with indigenous/ exotic trees	
NTFPs	Sustainable NTFPs utilization		Area exclosure and integration of NTFPs bearing plants	

Summarizing step 1 and step 3 above, the following is used as a criterion to identify potential landscapes for FLR intervention.

- ✓ Use LULC maps;
- ✓ Use forest and land degradation maps;
- ✓ Conduct forest and land resource/status assessment;
- ✓ Use restoration potential maps; and
- ✓ Use local knowledge

2.2 CONCEPTUALIZING AND DESIGNING (PLANNING)

STEP 4: PARTICIPATORY FLR ACTION PLAN DEVELOPMENT

Main Tasks

1. **FLR Action Plan (FLRAP) development**

The conceptualization and designing (planning) phase of this guideline consists of the following key points of consideration. Key activities to be accomplished under conceptualizing and designing FLR includes;

- Ensure landscapes are already prioritized and units within landscapes are identified/known during the first phase, i.e., visioning stage. This means the prioritized landscapes are demarcated and local level land use planning is performed with the consent of communities and stakeholders.
- Turn goals into objectives. This is objective setting for FLR intervention.
- Connect starting point with the ending point.
- Define the causal connection "how to get from point A to B" ("Theory of Change", "change logic", etc.).
- Actual detail planning or landscape transformation designing phase, which include identification and prioritization of potential measures/activities.

The objectives of this specific phase are to define;

- ✓ What is the ecosystem baseline and what are the social characteristics?
- ✓ What needs to be repaired or improved?
- ✓ What needs to be maintained or preserved?
- ✓ What are feasible interventions?
- ✓ Then, turning obtained various information in to FLRAP.

As you have been introducing each step at the beginning, here also introduce the activities of FLRAP exercise. Summarize (recap) step by step what they (the PIT) have done in the PLRA process so far and relate to the activities of FLRAP. Ask participants to share their experience on formal planning exercises such as PFM, watershed development and other development works in their area. Using buzz group ask participants the importance of planning citing examples. In your summary, let them know that we all have the experience of planning and FLRAP is similar to other planning exercise where participants can be engaged except for some differences such as applying the concept and principles of FLR and signing agreement (see Help box 8: Buzz group below).

Help box 8: Buzz group discussion
Procedure
Step one: Display a written question or statement and ask all participants to think about their response to initiate discussion. The question should be open with several possible answers. Example "What is the main cause of land degradation or deforestation?"

Step two: Ask participants to turn to their neighbor (to their left/right) and discuss their response and come with a consensus response. This is the "buzz" period where the noise level in the room rises to a gentle buzz as participants discuss their response. Ask the pairs to record their answers.

Step three: Once sufficient time has been given to allow reasonable discussion on the topic (5 to 10 minutes), ask each pair of participants to give one of their responses by asking "Can you give your first answer?". (Do not ask any of the pair to give all of their answers as this mean that other pairs may not be able to contribute). Record the response. Continue asking for responses until all possible answers have been given.

Step four: Process by summarizing the response and if necessary by asking for clarification ("Why" questions) and getting verifications from each other pairs on the summary responses.

Step five: Link this activity to the next activity by building on the basis of the response.

Divide the planning team into small groups and ask to draw a picture (vision map) showing the current forest landscape condition (point A) and the way they would like to see it in the future (point B) when they would be getting all the benefits they expect resulting from effective interventions. Summarize that they need to develop an action plan to guide their implementation, i.e., an action plan that connect point A with point B or an action plan that enable them to achieve at point B; which means landscape

transformation. Highlight that community needs from the landscape resource (e.g. forest) and the landscape condition (e.g. forest condition) must be correlated and the FLRAP also need to reflect that. For example, if the forest condition is moderate to good, then sustainable selective utilization can be the strategy and if it is a degraded forest the FLRAP needs to focus on developing the forest (see table 2). In developing the actual plan, the planning team need to sit together. Ask the participants to carefully brainstorm what activities or measures do we need to implement to address the problems, to increase the benefits from various land uses and resources (e.g. forest, trees), to improve forest condition, where to add trees in the landscape to increase carbon sequestration and to ensure that plans are implemented. Analyze their responses to include the range of possible restoration strategies and key measures across the landscape. For example, major activities of forest development and tree growing (restoration of degraded forest and landscape including agroforestry practices in the form of fruit development, alley cropping, home gardens, etc.), forest utilization, forest protection and forest monitoring as well as activities such as income generation activities (beekeeping, spice development, fattening, poultry, improved stoves production, etc.). Here note to use the information from PLRA (i.e., data collected and analyzed from PFRA, transect walk and PRA methods) and mapping results. At this stage all the information needed for the plan has been collected, analyzed, summarized and agreed.

One of the objective of FLR is to contribute to rural development and poverty reduction efforts of the government. Hence, (forest or nature conservation oriented) livelihood improvement strategies need to be incorporated within FLR planning process as one major component. Promoting forest-based livelihood is an integral part of FLR both to sustain and increase the buy-in for FLR intervention and enhance human wellbeing. So, "making forest markets work for the poor" through creating forest-based small scale community enterprises (businesses) are essential. Promoting forest-based livelihood is not only to benefit the community but also sustainable utilization is an essential strategy of biodiversity conservation in areas with large and poor population. Activities of livelihood improvement include assessment of forest-based livelihood potential (including non-forest based livelihoods that are friendly with nature conservation), forest-based product and market development, and business development. The livelihood development activities are to be summarized into a business plan document. It is good that a forest-based livelihood development guideline is separately prepared jointly by FLR actors. Here at this stage of the FLR planning process, the facilitators and communities need to be aware that forest based livelihood development plan can be part of an existing marketable eco-region product and the development focus should include value addition and new product development.

While developing FLRAP the team need to use or follow a certain template with the required content to guide and carefully formulate the framework of the action plan. For example, NABU Ethiopia's FLRAP (see FLRAP developed for Kafa, Sheka and Bench Sheko zones for details) template of its *Forests for Future* project consist of the following contents.

1. Introduction (Executive Summary and Background)
2. Landscape Analysis
3. Goal (General, Specific and Outcomes)
4. Identified Range of Restoration Strategies
5. Detailed Action Plan
6. Monitoring and Evaluation
7. Assumption and Key considerations
8. Conclusion

In the end, the action plan need to contain a detailed written consensus document on the future management of the selected landscape**.** The key decisions concerning the future of the landscape (objectives, users, rules) are discussed and agreed through consensus and set down in the action plan by the team. The planning, decisions and long-term benefits from FLR need to carefully take into account women and youth needs. This mechanism ensures that no individual or individuals can take arbitrary decisions. The experts (the planning team) together with the community representatives can compile the plan, to prepare it for final presentation to the whole community or FLR group. Where possible, targets must be quantified and breakdown across years. For ease of understanding by the community, local systems of measurement for magnitudes/amounts may be used.

Once the action plan is ready, the activities to be carried out in the year ahead should be worked out in detail using Gantt Chart. Again, this annual work plan can be done jointly by the forest expert (as a focal person) and the planning and implementation team. The annual work plan need to consist list of activities, indicators of success, targets, time schedules, costs, responsibilities, etc. The local government (forest office and/or agriculture office) should endorse the plan before it gets implemented. In order to reach in to a proper FLRAP one should consider the following points:

a. Discuss different restoration pathways and interventions that fits to the different current land uses and tailor to the local context (use community appraisal to tailor to local context);
b. Develop a fair cost and benefit-sharing mechanism;
c. Design a monitoring, evaluation, communication and learning system;
d. Discuss roles and responsibilities of each stakeholder; and
e. Establish grievance and redress mechanism (a kind of bylaws).

2.3 IMPLEMENTATION

STEP 5: ORGANIZING AND LEGALIZING COMMUNITY INSTITUTION(S) AND SIGNING FLRAP

Main Tasks

1. Awareness raising to community groups about CBO and legal provisions

Organizing and legalizing community institutions is the fifth step of FLRAP process. However, it does not mean this activity has to necessarily start after step four (i.e. after FLRAP is finalized). Actual activities of organizing community should start soon after the stakeholders and intervention landscape are identified and the PIC is established during the mobilization/ visioning phase. For FLRAP implementation, some actors establish legal and accountable community institutions at the start of the FLR process while others do this along the process after plan is developed. This as such does not make a significant difference but depends on the interest of the community. In some cases, some community members who really have environmental concern might be willing to first observe the process at the beginning than being a member and if we establish CBOs just during the establishment of the PIC the community institution might miss such concerned individuals. Hence, the mode of establishment of CBO for FLR could vary. Note also that it is advisable or possible to use existing organized CBOs (if any) such as PFM cooperatives/associations, watershed users' association (WUA)/cooperatives, participatory range land management associations, etc rather than establishing a new one. However, it needs to strengthen them in a way it works for FLRAP implementation. In any case it is essential to have organized community member for successful FLRAP implementation.

Hold a meeting with the PIC and additional members of the community representing elders, adults, youth, women, and different interest groups to discuss on the need for having legally organized CBO to implement the plan. It is good having a person with legal background (like cooperative experts, people from justice office) during the meeting to better explain about the importance of having organized community for development.

EXPLAIN that a community is normally made up of different formal and informal institutions or organizations – give an example of local institution. Also EXPLAIN that each community institution is formed for a specific role within the community. Having a strong representative CBO is necessary for the success of FLR and explore whether there is such an existing local institution, or whether it will be necessary to establish a new institution to implement the plan. Use a brainstorming session to ASK participants to identify the various existing local institutions in which they are members. ASK guiding questions to ensure that their responses include both formal and informal local institutions. CBOs could be organized around a most appropriate subject for the area such as around religious-based institutions, social affairs like *Ider*, PFM, WUA, service cooperative, saving and credit cooperative, etc.

Then analyze the role of existing CBOs in terms of their objectives, representation, etc using stakeholder analysis matrix (Help box 9: Institutional analysis matrix: Role of institutions in FLR). Explain community institutions that implement FLRAP need to be legal institutions mandated to implement FLR/natural resource management (NRM), and must represent the whole community groups/category and be accountable to the group. Verify if the existing CBOs are in line with these values. If not, conclude that there is a need either to reform the existing CBOs or establish a new institution. Check their consensus on the issue and allow discussion if there is other opinion on the alternatives.

Help box 9. Institutional analysis matrix: Role of institutions in FLR

Institution (formal or informal)	Objectives (main role and activities)	Membership and representation	Role in forest management	Possible future role as CBO or PFM
Church, mosque	Prayer, religious and burial services	Few are not members	Supporting forest maintenance, plant and manage trees in its compound	Far from objective and not involved in communal resources, but huge potential to engage, serve as seed source, etc esp. in conserving indigenous species.
Kebele administration	Overall administration	Not membership based	Administrative support/ forest governance	Not focused, only part of a bigger program, support for coordination
Idir	Social works, particularly help in burial service	Several in Goth, open membership, has strong sanctions	None	Share experience on bylaws, support group.
PFM	Forest development, protection and utilization (particularly NTFPs)	Several in and around natural forests, open membership, has strong sanctions	Role in forest management is high	Could be the main actor in FLR implementation with some modifications.
WUA	Development, protection and sustainable use of natural resources with especial focus on SWC on agricultural land.	Several in Goth, open membership, has strong sanctions	Contributes to agroforestry development, livestock management & solution to controlled grazing	Share experience on bylaws, potentially integrate FLR with watershed management and implement some restoration measures.

FLR deals with coordinating and managing complex environmental, social, economic, cultural and institutional issues concerning the day to day lives of the community. Hence, considering the capacity of the community in effectively handling these complex issues is important. Therefore, CBOs organized for FLR should be able to address such complex issues to the best interest of the community and their environment that could be treated and effectively handled within their capacity.

The best form of CBO for FLR is one that could have the form of association with the mandate to share benefits to its members and thereby can address the needs of its members and the coming generation. Establishing the FLR CBO in the form of cooperatives could answer this if the financial sustainability criterion is relaxed. However, as cooperative principle is not only of economic participation but also has concern for social aspects of the community it is the best available option for FLR. In most cases it gives wider opportunity to link economic, environmental and social needs of the community.

2. FLR agreement development

During the above meeting (in a meeting), pose a question to participants (CBO members) about the experience in their community on what two individuals do to ensure that the other party is doing what is expected of him/her (e.g. in share cropping, '*Wonfel*', '*Ekub*', '*Kenja*', '*Debo*', etc). Make sure the answer is that there must be a legal binding agreement (written or verbal) between the two parties.

Relate this situation with FLR explaining that there is a need to have FLRAP implementation agreement between the responsible government organization (Forestry, Agriculture) and the organized community (CBO). Use brainstorming session to ASK participants to identify the link between the FLRAP and the FLRAP agreement.

PROCESS the response to include:

i. A formal agreement will allow the plan to be implemented; the plan may not be successfully implemented without a formal agreement and approval of the government.
ii. A formal agreement allows formal recognition of the FLR CBO (cooperative) as FLR managers/official partners in FLR implementation.
iii. A formal agreement confirms (legitimizes) the user rights.
iv. A formal agreement formally establishes the roles and responsibilities of the different parties.

SUMMARIZE that having such formal and legal agreement that recognize the FLRAP is needed before it can be implemented. Hence, formulate such a comprehensive agreement (using standard template) document and enrich with discussion. Signing of the agreement will make the FLRAP agreement a legal document and secure the rights of the community. It also helps them to demand technical and administrative support from relevant government offices as per the agreement. It will not only define their rights but also specifies their duties and responsibilities towards FLRAP implementation and management.

Internal bylaws are to be developed by the CBOs with the assistance from the district government office responsible for the task. It is important to consider local and traditional forms of social control and the variations in people's economic situations during the elaboration. A model bylaw may be prepared to be used as a point of departure. In this case, it is necessary to adapt to local situations so that they are used effectively.

3. Approval and signing of the FLRAP Agreement

Organize a ceremony at which the FLRAP implementation agreement is signed and official partnership is legally established. The signing of agreement is beginning of a new era in the FLR management where the community members (CBOs) are becoming a responsible partner in FLR management. As part of this ceremony, let the Secretary or the Chairperson or someone representing the FLR CBO present the process they have gone through and the major rights and responsibilities of the agreeing parties. This could be conducted during the ceremony at which representatives of government institutions and community are signing the agreement. Ideally, photographs of the ceremony should be taken. Steps that usually need to be followed in signing the agreement are:

i. ENGAGE all relevant government offices to take part in or attend the ceremony. In addition to the two agreeing parties, the Kebele administration, Woreda cooperative development office, Woreda office of agriculture (if the Forestry office is an agreeing signatory), and Woreda Administration will sign the agreement as a witness and supporter.
ii. IDENTIFY individuals who will represent and sign on behalf of each party and act as witnesses to signatories.
iii. MOBILIZE and ORGANIZE resources and logistics necessary to ensure the inauguration and signing ceremony, making sure that all the necessary participants are informed and able to attend.
iv. FIX schedule and appropriate venue for signing the agreement.
v. At the signing ceremony it is expected that the FLRAP agreement and bylaws will be signed. Note that the FLRAP, site maps, signed CBO bylaws, etc are annexed to the agreement.
vi. Hereafter, copies of the signed agreement document (along with the annexes) must be distributed to all relevant parties (the signing parties, the witnesses if needed, the administration at different levels and other relevant legal body).

STEP 6: CAPACITY BUILDING AND SKILL DEVELOPMENT

Main tasks

Although steps five and six of the implementation phase comes after the FLR planning phase, it does not mean that some activities of the implementation phase (i.e. capacity and skill development and participatory monitoring and evaluation) start only after planning is finalized and the agreement is signed. Partly, these activities actually start during the visioning phase when the first FLR training (briefing and introductory trainings) is provided for community members and is continued throughout the various processes as planned and needed. Hence, capacity building and skill development is not a one-time event. The emphasis here is to highlight important activities and equip implementers with the required capacity/skill after the signing of the agreement so as to ensure effective implementation of FLR actions. Major activities in the implementation phase involves putting all the FLRAP/activities into action. To effectively implement these major activities, the community and the relevant stakeholders needs support in the form of capacity building (technical skill development and administrative support provisions).

1. Institutional capacity development

Capacity building and skill development is very critical for the success of FLR, particularly institutional capacity of CBOs matters the success of FLR. Institutional support is one of the key success factor for FLR and hence institutional capacity to provide such support is critical. The institutional capacity can be expressed in several ways. This includes the institutional capacity of relevant government, CSO and CBO institutions to coordinate the overall FLR implementation and provide the required support such

as technical, financial, governance, leadership, decision making process, etc. It can be in terms of effectiveness and efficiency of FLRAP implementation with the presence and support of their legal provisions and internal bylaws. For the CBOs, this means whether their bylaws have categorized penalties/punishments and effectively being enforced; transparency of actions taken by executive committee; whether the committee is encouraging the participation of individual members, particularly women, youth and the poor; and the level of understanding that governance issues may jeopardize the participation of individual members and the functions of the community institution, etc.

Hence, first assess and know the institutional capacity together with the CBO's and sub-committee leaders. Identify gaps that affect the successful implementation of FLRAP and needs to be fulfilled for the same. Ask them to brainstorm qualities of a good FLR cooperative/community institution. The answers for good qualities of a community institution can be summarized as:

- holding regular meetings in which more than 75% of its members are in attendance most of the time;
- regular meetings are held by the Executive committee and resolutions are implemented;
- members know that right and responsibility are two sides of a coin;
- participatory decision making process;
- solves problems on time and easily;
- transparent in its activities and engagements with others;
- equitable share of benefits and responsibilities among members; and
- effective in implementing its bylaws.

Other indicators include important elements such as good financial management and record keeping. Therefore, designing the institutional capacity development interventions include actions for strengthening those good qualities of the CBOs and organizing/ facilitating specific trainings on selected topics/gaps as well as equipping them with the required basic inputs/materials. This is also the same for the relevant government and CSO actors. It needs to assess their gaps and existing opportunities to know the available institutional capacity and act accordingly on the gaps as needed.

2. Technical skill development

As FLR deals with long-term process and multidiscipline proper implementation of the FLRAP requires good technical skill and knowledge that enable to maximize the benefits of FLR. Hence, in order to enhance the effectiveness and successful implementation of FLR, regular skill development and capacity building works are required. Training and skill development needs and gaps could be gathered in three ways:

(i) by conducting need and gap assessment of the key restoration actors/institutions;
(ii) based on requests from the CBO administration/ members, experts and government institutions; and /or
(iii) from annual monitoring work outputs.

In general, technical skill and capacity development must be a demand-driven and tailored support to the CBOs and relevant government institutions. The topics of skill and technical capacity development trainings need to necessarily contribute to the effective implementation of the FLRAP and its sustainability. Based on the requests from the community, to implement FLRAP and annual work plans, extension workers (DAs, community facilitators, forest extension workers, PIT members) can provide demanded technical training support at a time convenient for the community. Apart from topics that capacitate to implement the range of restoration strategies and specific restoration measures, the

technical skill training needs to include topics on livelihood diversification to help the CBOs (forest cooperatives) develop livelihood development enterprises such as NTFP production and marketing, small scale wood products and value addition and market developments. The best option for livelihood development is to link the CBOs with other forest/nature-based livelihood development actors working on forest-based livelihood options through establishing nature-based livelihood enterprises.

3. Provision of administrative support

During implementation of the FLRAP there could be certain instances where the FLR/PFM CBOs requires external administrative support from Woreda level government offices, service providers and local administrators. It is the responsibility of extension worker's (DAs) to help bring such requests to the attention of relevant officers, government offices and local administrative bodies when the case is beyond their scope to solve. Some of the required administrative support includes community dealings with NRM crime and conflict management within the community. The NRM extension workers at local level need to facilitate to secure legal and administrative backing for the engagement of the CBOs with offenders. At a higher level, bureaus dealing with forestry and natural resource governance (such as the Bureau of Forest, Environment Protection and Climate Change /BoFEPCC/, Bureau of Agriculture /BoA/, Cooperative Development Agency, Forest Enterprise and other environmental agencies) and their respective zonal and Woreda line branches need to jointly work to mainstream environmental/ natural resource/forest governance at all levels. This includes those prosecutors; the police and the judiciary have to understand and appreciate the community's collective action and be concerned with the damages caused by offenders/free-riders on community agreements. For such case having a Platform that brings the key stakeholders together is an advantage to improve the enabling factors. The established Southwest Forest Alliance (SWFA) Platform (a regional FLR Platform) in the Southwest Ethiopia Peoples' Region (SWEPR) is a good example that can serve to provide a good natural resource (forest) governance issues and facilitate the smooth implementation of FLRAP throughout the region.

STEP 7: BACKSTOPPING AND SUPPORTING THE SUCCESSFUL IMPLEMENTATION OF THE FLRAP MEASURES

Main tasks

In addition to organizing and arranging community members (step 5) and progressively building capacity of institutions and relevant personnel (step 6), continuous backstopping and support to the implementation of FLRAP measures is another key element of the implementation process. This step includes all the activities that enable to transform the detailed action plan or list of activities/measures into action. It involves the process of putting a project plan into action to produce the deliverables (outputs, outcomes). The major tasks are;

1. Allocate budget

Although not all the FLRAP activities are expected to be implemented using budget, relevant restoration actors (FLRAP implementers) need to allocate sufficient budget for the key project activities including for capacity building activities. Financial resource is one of the key input to commence the implementation of the action plan. The required budget can be commonly made available through

project based approach using funding obtained from donors or through regular public funding. The former is a common approach mainly when such action plan is implemented by CSOs (NGOs) and international development partners while the latter is common when such action plan is implemented by government's regular annual plan. Another possible funding option is when there is availability of private sector interested to invest on restoration which create a third funding alternative. In any case allocating sufficient budget for the execution of the planned activities is one key FLR success factor. Hence, allocate budget (both for program and administrative costs) and then properly and efficiently utilize for the successful implementation of the FLRAP.

2. Assign/employ personnel and supply required inputs

Skilled and professional manpower is essential for the successful implementation of FLR initiatives/projects. A trained man power that understand and successfully lead the implementation of FLRAP is required. The required professionals include those trained in forestry, NRM, agroforestry, watershed management, and similar disciplines as key manpower. Hence, the FLRAP implementing organizations (CSOs, government and private sector or Private Limited Companies/ PLCs) need to assign or employ the required project coordinator, facilitator, officer and/or technicians or local level facilitators or extension workers along with defined job description. It is also necessary to timely supply the required inputs for the implementation of FLRAP such as tree seed, tools, equipment's, materials, etc and logistic services such as vehicles, timely procurements, etc.

3. Facilitate, Steer and Catalyze the implementation process

The assigned trained personnel need to coordinate the overall smooth implementation of the FLRAP and closely work with the established PIT, PIC and CBOs, including with the relevant stakeholders at all level. They are also responsible to provide the required backstopping, support and facilitation for the effective implementation of the action plan. Facilitating, steering and catalyzing the implementation process is a key role of the assigned personnel to properly execute the measures as per the plan. It needs to facilitate the effective coordination of the established PIT, PIC and CBOs to enable them play their key role in FLR implementation. One key role of the assigned personnel is technical support and backstopping throughout the implementation period. Following up the action plan schedule/activity time table, handling all the implementation routines and timely execution of planned measures are among key facilitation and steering activities required for the effective implementation process.

4. Identification and prioritization of appropriate measures (toolbox of appropriate measures)

The general identification and prioritization of appropriate measures can be conducted during the process of FLRAP development (step 4). However, detailed and tailored identification and prioritization of appropriate measures per intervention site and beneficiary community is to be conducted during the actual implementation phase. This is to be made to determine both the specific range of restoration strategy and livelihood improvement measures. Accordingly, the following are developed and can be used as a toolbox for addressing the problems of forest disturbance (degradation, fragmentation and deforestation), loss of biodiversity, climate change impacts and livelihood improvement that are identified and prioritized for site specific restoration and livelihood improvement intervention, especially for the Southwest Ethiopia context.

a) Identification and prioritization of appropriate restoration measures (toolbox for restoration)

A range of restoration strategies (see developed zonal FLRAP for selected restoration strategies in the context of Southwest Ethiopia landscape) might be suitable for the same unit of landscape and for the site to regain its ecological functionality and address human wellbeing. Among those range of restoration strategies, once the landscape is known, identification, prioritization and selection of the most appropriate restoration strategies/ appropriate tools (measures) can be done using the following criteria.

1. Know the level of forest and land degradation of the specific site (use information from step 1 and 3) under consideration;
    - e.g., If level of forest degradation is low focus on natural regeneration; if it is medium with relatively moderate regeneration status focus on assisting natural regeneration; and if the forest is servery degraded and regeneration status is low focus on enrichment planting as proper measure.
2. Know the preference of land owner/local community and local decision makers. Based on these, define the specific purpose of the restoration site. Then, evaluate the natural potential of the site (land uses) and select proper measure (s).
3. Cost and duration of restoration options; focus on measures with comparatively low cost to meet the same purpose. Cost is also associated with the duration of restoration options.
4. Local knowledge/existing experience on the available options/measures. Go for building on existing knowledge and tailor to the context.
5. Urgency and easiness of the measure for implantation by the community and local government.

Accordingly, the following are tools identified and prioritized for restoration of degraded forest and landscapes in the context of Southwest Ethiopia;

1. Assisting Natural Regeneration (ANR).
2. Enrichment planting.
3. Reforestation/Afforestation (community plantation, buffer plantation, corridor establishment, boundary planting, woodlot, and bamboo development).
4. Agroforestry (Home garden development/multi-storey agroforestry, coffee based shade trees, spice based support and shade trees, fodder tree and shrub development/silvopasture, apiculture/bee forage, wind breaks).
5. Land use improvement and management practices (biological soil and water conservation, pasture/grazing land rehabilitation, tree based soil fertility management).
6. Seedling production.
7. Forest protection.
8. Development and implementation of forest management plan.

b) Identification and prioritization of appropriate livelihood improvement measures (toolbox for livelihood measures).

From the sustainable livelihood framework perspective, it is clear that natural capital is one of the five key livelihood assets and this shows that following nature friendly livelihood improvement approach ensures sustainability. In line with this, a broad range of possible nature friendly livelihood improvement measures that are suitable for beneficiaries in the Southwest context and help to address community needs and climate change adaptation while contributing to reduce forest degradation and sustain ecological functionality are identified (see developed zonal FLRAP that include the broad range of selected livelihood improvement measures in the context of Southwest Ethiopia landscape). Among these range of livelihood improvement measures (toolbox for livelihood options) further identification, prioritization and selection of the most appropriate beneficiary specific livelihood measure (s) can be conducted using the following criteria.

1. Know the natural capital potential of the area/landscape through mapping, PFRA (or participatory resource assessment, e.g. identification of potential NTFPs) and community discussion;
2. Understand the link of specific livelihood option with nature conservation/sustainability/ Relevance of the livelihood measures to the problem of SW forest, biodiversity, community, climate, etc;
3. Know beneficiary's interest, capacity and experience on the specific interventions and livelihood options /workability of the option(s) by the beneficiary's skill and knowledge/;
4. Consider past lessons and experiences of any organization's and project's practice;
5. Consider market condition (market potential);
6. Take into account its financial feasibility (financial capital intensiveness/affordability).
7. Availability and sustainability of inputs (tools and technology) and infrastructure required; and
8. Social acceptance of the business/livelihood options.

Accordingly, in the context of Southwest Ethiopia, the following appropriate livelihood improvement measures (toolbox of livelihood options) are identified and prioritized for intervention by tailoring to specific context;

1. Promotion of backyard beekeeping (beekeeping).
2. Garden coffee development.
3. Spice development.
4. Bamboo processing.
5. Tree seed collection and marketing.
6. Multi-story agroforestry development (with fruit tree, '*enset*', etc).
7. Poultry production.
8. Small ruminants' production and fattening.
9. Woodlot establishment with fast growing species.
10. Promotion of nature based ecotourism.
11. Introducing and promoting permaculture.
12. Community plantation establishment.
13. Mushroom production and marketing.
14. Herbs development and marketing.

2.4 SUSTAINING

STEP 8: MONITOR, EVALUATE AND REVISE THE PLAN

Main tasks

1. Decide on the types of monitoring to undertake

Monitoring is defined as a systematic gathering and analysis of information to check if something is changing or going well. It is often overlooked or neglected in practice. However, monitoring short-term and long-term outcomes is essential for successful restoration. As FLR is a long-term process and a true success is obtainable only decades after the initial project interventions, monitoring is needed to evaluate and document successes and failures. Monitoring is also essential for long-term management of FLR and hence feedback from monitoring allows adaptive management and indicates when corrective or further interventions may be required. Future land use or policy changes might also occur outside of the area of a restored landscape, and monitoring change over time within the project area indicate when such external forces have threatened sustainability of the FLR project. Discrepancies between planned activities or intended goal and actual FLR implementation may vary. Hence, monitoring is integral to FLR project that help to manage restoration and know whether it goes as intended.

Domination of short-term perspectives is inherent in the nature of restoration projects that neglect the long-term perspectives needed to assess success or failure of FLR. Often, monitoring is limited to assessing short-term achievements or documenting that project tasks have been conducted as budgeted. Although accountability to funding agencies (donors) and stakeholders is necessary, monitoring should not be limited to short-term needs or project period achievements. Rather, the purpose of conducting monitoring are:

- To gauge success of the FLR project;
- To check if implementation goes as planned;
- To identify unintended consequences that threaten sustainability of the restoration;
- To determine if and when further intervention or corrective measure is needed;
- To document, report and communicate FLR progress and success;
- To evaluate and adjust plans;
- To support decision; and
- To draw and share lessons.

Given the typically 3-5 years' lifetime of FLR projects funded by governmental and non-governmental donors, there is a pressure to allocate the available funding to immediate activities. Yet, the need to design and implement a monitoring program right from the start of a restoration project shouldn't be over-looked. Hence, a cost-effective monitoring system must be considered and focus on the smallest set of indicators that relate to the project objectives. Ideally, the indicators can be measured simply/ easily and sufficiently to monitor changes. Furthermore, monitoring takes place at different spatial scales: from the very specific restoration actions at the local level, aggregated to the landscape level, and incorporated into the national (and global) restoration efforts. Hence, having clear monitoring indicators are important. In this document, we present a coherent approach to monitoring at multiple scales that are oriented towards FLR objectives. Generally, it is advisable that FLR monitoring system and tool need to combine spatial data as changes over the landscapes are visually noticeable.

Important characteristics of FLR monitoring: FLR projects occur at multiple scales, from the national level to a particular landscape, possibly a unit of landscape. As implementation occurs on different sites or landscape units, each activity may be monitored in several ways by different indicators. These indicators may be biophysical or socioeconomic parameters and preferably both. In practice, many activities will run concurrently and implemented by different stakeholders. All needs to be coordinated in order to have an impact at the landscape scale. For example, large projects comprised of multiple landscapes require monitoring both at individual landscape/project level and at the combined/aggregated overall landscapes level.

In addition to the multiple spatial scales of FLR projects, there are also multiple temporal scales. Some activities or some indicators of an activity may need to be monitored for a short time while other indicators are to be monitored over the long-term. Long-term indicators may need to be measured at relatively short time intervals initially, and then at longer period of intervals. For example, planting seedlings are often an activity in FLR project. Survival (or conversely mortality) count may be determined to take place biannually during first 2 years, then annually for the 3rd -5th years, and combined with growth measurements at 5-year intervals until crown closure depending on the specific tree species.

However, monitoring is frequently overlooked because of its perceived cost and complexity. Yet with the right choice of indicators, monitoring shouldn't be overly complex. Furthermore, local stakeholders need to be actively involved in monitoring to ensure its sustainability in the long term.

Types of Monitoring

a) Surveillance monitoring

Typically, surveillance monitoring is an ongoing program to measure specific factors such as continuous forest inventory and population census. This type of monitoring usually measures permanently located sample points across years to uncover trends in target response variables. Valid comparisons can be made between intervals if samples are well distributed spatially and the sampling protocol is fixed. In a biophysical context, the important question that a surveillance-monitoring program answers is "Are ecological properties changing in some undesirable way through time, or do we perceive an association between a particular land-use activity and a negative indicator?". Socioeconomic surveillance monitoring usually samples units larger than biophysical surveys or as defined by administrative, rather than natural boundaries. Surveillance monitoring is expensive and covers a much larger area than most FLR projects. If surveillance-monitoring programs are available, their results are useful for establishing baselines for an FLR project and may provide important information on historical trends.

b) Implementation monitoring

Relatively short-term monitoring is conducted often to determine whether activities were undertaken as planned or specified by a contract. Implementation monitoring provides the information required by funding agencies or donors. For example, in planting seedlings, implementation monitoring would answer the questions of whether adequate stocking was achieved, as indicated in the project implementation and monitoring plans. Each planted area would have to be monitored at several stages over the initial 3-5 years. Best practices for monitoring are to include GIS data layers that provide detailed information on how, when and where interventions (project activities) were conducted. Geo-referencing project intervention sites are useful in the short term for documentation and later in the project life cycle for effectiveness of monitoring. Data layers can be established in the early planning stages and then updated

as activities occur. Use maps produced by the GIS system to plan monitoring activities. Permanent plots established initially for implementation monitoring should be geo-referenced using field GPS systems. Additionally, initiate photo documentation of project activities at different stage and establish permanent geo-referenced/geotagged photo plots**.**

c) Effectiveness monitoring

Effectiveness monitoring begins to answer the question "Was restoration successful?" By this, we mean were the sum of restoration activities effective in reaching the stated goals, which include social, economic and ecological dimensions. Effectiveness monitoring thus has both short and long timeframes, and conducted at multiple spatial scales. Stratified sampling reduces costs and efforts, especially as compared to surveillance monitoring, but must be targeted to address effectiveness of explicit objectives and sub-objectives as detailed in the implementation plan (FLRAP). Effectiveness monitoring is distinguished from implementation monitoring at both temporal and spatial scales. Monitoring long-term effects, in addition to short-term effects, requires a commitment to repeated sampling for many years.

While implementation monitoring is limited spatially to the physical features of restoration activities, effectiveness monitoring must also detect effects on important landscape features that may not have been directly manipulated by project activities. For example, sampling for plant biodiversity effects of a project includes all plants that occur over time, not just the planted ones. Developing an effectiveness monitoring protocol comes face to face with two important questions: What to monitor and at what intensity? The answers will be specific to the project context (the landscape and restoration objectives) and require identifying appropriate criteria and indicators.

Careful identification of the monitoring criteria and indicators to implement are challenging questions. When thinking of restoration process, there are three phases; *degradation, restoration* and *post-restoration* phases. Hence, identification of monitoring criteria and indicators typically need to be addressed within the limits of available funding and what to focus to monitor at each phase. Selection of relevant parameters to monitor in the pre-restoration (degradation phase or baseline), restoration phase (ongoing process) and post-restoration (livelihood improvement phase) are closely linked to the objectives and sub-objectives specified in the FLRAP. The list of potential indicators to measure can easily become exhaustively long and consume the entire restoration budget if perfectionism is allowed to rule. Therefore, sound judgement and priorities are essential. Thus, steps to follow in effectiveness monitoring are:

- Identify what to monitor (develop criteria and indicators related to objectives at each phase);
- Establish threshold points where further intervention is needed;
- Develop a sampling design;
- Collect and analyze data;
- Evaluate results and communicate to stakeholders;
- Re-evaluate the process in order to guide future efforts.

d) Socio-Ecological Effects Monitoring

Socio-ecological effects monitoring seeks to know if the restoration actions resulted in to social and/or ecological benefits, trade-offs or unintended consequences. Just as effectiveness monitoring measures project outcomes, socio-ecological effects monitoring measures whether an FLR project actually accomplishes landscape restoration. In some ways, this form of monitoring resembles to surveillance monitoring in spatial and temporal scales: it is very long-term, requires looking beyond project boundaries, and is likely beyond the resources of the FLR project. However, an appropriate effectiveness-

monitoring scheme can provide the foundation for measuring and monitoring socio-ecological effects. An FLR projects deemed successful in the short- to medium-term may not sustain desired outcomes into the future, particularly if the FLR project is not adapted to external forces including for example population growth, land use change and altered climate.

2. Decide on the Procedures of Monitoring and Evaluation

As described in the previous sections, in FLR planning and implementation process all activities involve all relevant actors and the community institution is expected to coordinate the involvement of their community members. One of the major phases in FLR process which needs equal emphasis as planning is the participatory monitoring and evaluation. Monitoring and evaluation (M and E) is a critical step for the success of FLR implementation where communities continuously learn from the changes they brought through their restoration actions.

Participatory monitoring is monitoring activities with the active involvement of the community. M and E is a continuous management function to assess if progress is made in achieving expected results, to spot bottlenecks in implementation and to highlight whether there are any unintended effects (positive or negative) from a programme or project. The operational process should be periodically assessed i.e., monitored and evaluated for effectiveness. The M and E process basically helps to attain two major objectives:

i. to assess progresses of FLRAP implementation, and its successes and failures; and
ii. to investigate problems encountered as well as need for capacity building. This helps to take corrective measures if there are any discrepancies between planned and actual results.

Though monitoring takes place on regular bases formal monitoring of the implementation process should be made quarterly by the CBOs and PIC (Kebele level monitoring team) with maximum of 5-7 team, biannually by the PIT (Woreda level team) and FLR management committee (FLRMC) that mainly include project team with few zonal representatives (a maximum of 4 representatives; 2 from Woreda, 1 from zone and 1 from project team) and annually by higher level small team (project management and key top government representatives), which may include project signatory bodies, depending on the type of the activity targeted for monitoring. This annual, biannual and quarterly formal monitoring should be brief and reflect on performances within a quarter, biannual and annual periods, respectively, and identify any major constraints encountered and accordingly help to adjust work plan for the successive implementation period. The monitoring processes should also assess the effectiveness, transparency and internal stability or integrity of the FLRMC and its management. The following are the steps that can be used to conduct M and E:

a) Discuss the objectives of participatory M and E (PM and E)

The monitoring sub-committee of the FLR CBO with the involvement of its executive committee is taking the lead in forming Kebele level monitoring team representing the FLR CBOs, DAs and relevant Kebele government/community representatives. On the other hand, the project team (FLRMC) shall take the role of establishing the zonal plus Woreda level monitoring team. Then, these two teams shall make up and handle the PM and E at the respective level. It is good if the monitoring team receives training on PM and E at the initial stage. Jointly discuss and define the objectives of PM and E. To start the monitoring process, to reach on the same understanding and agree on the objectives, ask participants to brainstorm why they need to carry out monitoring and evaluation as part of the FLRAP implementation. The response shall be to undertake corrective measures in time, prepare the next work plan, improve implementation, identify technical and administrative capacity gaps, further strengthen

good implementation capacity, etc. In general, conclude that M and E involves two major categories; M and E of financial and institutional management of the FLR CBO and M and E of the FLRAP implementation.

b) Agree on the elements to be monitored

Before starting the process of participatory monitoring, participants of both monitoring teams need to agree on the elements to be monitored by each team. Agreement can be reached through discussion on the major activities of the CBOs with respect to institutional management and FLRAP implementation. These include various FLR activities such as restoration, protection and utilization and enforcement of bylaws, record keeping, duties and responsibilities of different committees, etc.

The next step is to establish SMART[9] indicators for monitoring. An indicator is something against which to measure change. The most important indicators are usually not quantifiable. Qualitative indicators give more meaningful measures (see Help box 10).

Help box 10: Tips to consider when developing indicators

- Indicators can be qualitative or quantitative and should be SMART. Note that they do not need to be perfect.
- Indicators can be measured using different formats depending on the particular context. For example, pictures and stories, measuring and counting, scaling and rating (bad, good, very good), etc.
- Taking into account the nature of FLR know what change you need to see and focus to measure it.
- Learn from others experience.
- "Less is more." It is better to identify fewer indicators that are meaningful and useful than a long list that is difficult to gather and not realistic.

Reasonable key issues or indicators may be selected. These indicators must be objectively verifiable or measurable variables of the restoration results; outputs, outcomes or impacts (effects). Example could be number of seedlings planted versus planned; number of regenerating seedlings and saplings or growing trees since the start of FLR; amount of honey produced versus planned; number of improved energy saving stoves produced against planned; number of offences recorded since FLR etc. In general, the M and E indicators should be established jointly.

c) Decide which data collection tool is to be used

For each indicator or set of key information, the team chooses the most suitable data collection tool(s) or methods that can be used to gauge changes in these indicators. Before using the method for real assessment, test it with community members as most methods look easy on paper but require fine-tuning once you start to use them in the field. The data collection tools should be simple, adjusted to the capacity of the community and other monitoring team members. Tools such as PFRA, comparative assessment of work accomplished versus plan in the FLRAP and annual plans, financial balance sheet, interviews with members, etc. can be used in addition to PRA tools as found necessary. Major data collection tools generally include interviews, focus group discussions, observation or testing, photography, measurements, video, surveys, document review, questionnaires and case studies. Hence, the team need to decide which tool(s) to use.

d) Conduct PM and E

Once objectives of M and E are set, indicators are defined and data collection tool is chosen, conduct the PM and E as agreed. Based on the indicators measure the changes or impacts using the agreed

[9] SMART indicators are specific, measurable, achievable, relevant, and time-bound indicators that are used in monitoring and evaluation.

format. E.g., “Before and after” FLR intervention, corrective actions, etc. Use as a guiding principle “less is more". It is better to collect less data and actually use it than collecting data you do not use. Keep asking why particular information is needed, by whom and why there is change in the landscape features and community.

e) Analyze and present results

Data analysis or “making sense of the data” is challenging and often benefits from facilitators input and guidance. It is important not to focus on data collection at the expense of analysis! It is strongly recommended to analyze the data as you collect it. Because analysis often inspires new questions that require further data collection. As soon as the analysis is done results should be presented to both the FLR CBO management committee and FLRMC’s for reflection and learning. Results can be presented in various forms e.g., using ranking, scoring, proportional piling, percentages, histograms, ladder diagrams, radar diagrams etc. During their meeting the FLRMC and FLR CBO should also reflect on the why, how, when problems happened and list down a tentative gap analysis for which they demand skill development or capacity building or take corrective measures.

f) Make use of the PM and E findings

Use results of the M and E in decision making, planning, implementation, and management of the FLR activities. Based on the M and E results, revision of the FLR plan may be made as necessary to improve performance and gain from achieved objectives and goals. Moreover, a regular five-year (in case of project, mid-term and terminal) rigorous evaluation of the FLR process should be conducted. The evaluation process need to develop a protocol and indicators by a joint committee of CBO, FLRMC and government representatives. The major component of the evaluation protocol should comprise degree of achievements of the FLRAP, internal stability and transparency of the CBO administration, law enforcement process and others. Evaluation should be conducted at certain interval in addition to the one at the end of FLRAP implementation period. The evaluation process should be bidirectional i.e., not only the state counterpart should target the assessment for the performance of the FLRMC but also the other way round whereby the community assesses whether the state counterpart is performing its roles and responsibilities. The purpose of the evaluation should be to reflect on achievements of both parties whether they are "on course" to achieve the long-term aims of FLR, and if necessary to make adjustment on their future ways of doing things. Hence, this phase is where the two parties learn from their successes, failures and challenges. Therefore, it will help them to re-adjust some of the fundamentals such as re-negotiate on benefit sharing mechanism, roles and responsibility, capacity needs and others.

3. THE WAY FORWARD

Ideally, the first priority in the conservation and use of forest, biodiversity and other land resource is sustainable management. However, wider issues such as population pressure, unwise resource use, poverty, loss of biodiversity, climate change and mal-governance are putting increasing pressure on natural resources and forest as well as land degradation has become widespread. Thus, FLR is needed to respond to forest and land degradation problems and as a means of restoring the functionality of degraded forest and other landscapes, enabling local people to obtain decent livelihoods and improving environmental outcomes. Restoring forest and degraded landscapes, and sustainably managing and protecting existing forests are a cost-effective strategy for attaining various global, national and local goals including reaching the goal of Paris Agreement on climate change, which aim to limit the global

temperature rise to 1.5 °C. The SDGs, Convention on Biological Diversity, Bonn Challenge/New York Declaration, Land Degradation Neutrality/combating desertification, and several other globally agreed policy instruments, including the UN Decade on Ecosystem Restoration (2021–2030), recognizes FLR as an important approach for achieving the aspirations such instruments embodied.

The ambition of this document is to support the successful implementation of FLR by effectively guiding the various restoration actors/practitioners in the process of designing and implementation of FLR to attain desired goals and aspirations; and to inform decision-makers, restoration managers and donors about the requirements for successful implementation of FLR interventions. Hence, as a way forward, a number of immediate actions can be taken to encourage the use and uptake of this guideline at national, regional and local levels. These includes the following actions:

- Apply the guideline as a reference and guiding document in the planning and implementation of FLR interventions mainly at regional, zonal and local levels, as well as in making finances available for FLR.
- Use the toolboxes in the guideline to assist a proper identification, prioritization and selection of specific intervention landscapes and sites, and site specific restoration strategies and livelihood measures to be followed for the site specific context, especially in the Southwest context.
- Use the guideline as a vehicle for increasing capacity in your area to undertake FLR, in combination with other specific guidelines, tools and approaches.
- FLR practitioners are encouraged to identify landscapes where FLR deems necessary and apply FLR project(s) following the guideline for testing and generating lessons for future improvements.
- Promote the guideline among governmental and non-governmental organizations including other interested stakeholders. Promote the guideline using established National, regional and local level FLR Platforms.
- Consider the guideline as an important contribution for the effective implementation of Ethiopia's FLR initiatives and to the existing community of practice, and use it for the improvement of enabling environment including for the development/improvement of conducive FLR strategies.
- Promote the dissemination and application of the guideline by local actors and other stakeholders. This involve the production of simplified versions adapted to local contexts and local languages.
- Monitor the impacts of the guideline in changing and shaping FLR practices throughout Ethiopia and document the lessons for future improvements on the guideline.
- Understand this guideline as not a very complete document in its current status but to be improved with future exercises and experiences to make it a very comprehensive government FLR guideline.

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ANNEX 1: GLOSSARY OF TERMINOLOGIES

Terminologies	Description /definition of terminologies
Adaptive Management	A structured, iterative process of robust decision-making in the face of uncertainty with the aim of reducing uncertainty over time via system monitoring.
Afforestation	The establishment of a planted forest on non-forested land.
Biodiversity	The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems [From the Convention on Biological Diversity, 1992].
Degraded Forest Landscape	Forest conditions other than those found in primary or managed natural and planted forests. "Landscape" is defined in this context as socio-ecological system that consists of a mosaic of natural and /or human-modified ecosystems, which can encompass areas of 10 to 100s square kilometers. It includes all the visible features of an area of land with a mosaic land use.
Degraded Forest Land	Former forest land severely or moderately disturbed by the excessive harvesting of wood 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.
Degraded (Natural) Forest	Forest that delivers a reduced supply of goods and services from a given site and maintains only limited biodiversity. It has lost the structure, function, species composition and/or productivity normally associated with the natural forest type expected at that site.
Ecological Restoration	The process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed, using the concept of a native reference ecosystem as a model for setting and evaluating restoration objectives. It is a process aimed at recovering ecosystem integrity and resilience while delivering ecosystem services and ensuring human wellbeing. The conservation and restoration of biodiversity is usually a primary goal. Ecological restoration is the link needed to move local, regional, and global environmental conditions from a state of continued degradation, to one of net positive improvement.
Ecosystem Restoration	A term often used interchangeably with "ecological restoration", but ecological restoration always addresses biodiversity conservation, while some approaches to ecosystem restoration may focus solely on the delivery of ecosystem services.
Ecosystem Services (Environmental Services)	All benefits that people obtain from natural or semi-natural ecosystems, including provisioning, regulating, cultural and supporting services.
Elastic Capacity of a Forest Ecosystem	Dynamic forest processes within a range of changing vertical forest structure, species composition, biodiversity and productivity normally associated with the natural forest type expected at that site.
Endemic Species	A species native to, and restricted to, a particular geographical region.
Enrichment Planting	The planting of desired tree species in a modified/degraded natural forest or secondary forest or woodland with the objective of creating a forest dominated by desirable (i.e. local and/or high-value) species.
Forest Degradation	The reduction of the capacity of a forest to produce goods and services (in which "capacity" includes the maintenance of ecosystem structure and functions).
Forest Landscape Restoration	The long-term process of regaining ecological functionality and enhancing human well-being across deforested or degraded landscapes.
Jurisdiction	An area in a country under the control of a subnational government entity which is different from that in neighboring areas.
Landscape	A socio-ecological system that consists of a mosaic of natural and/or human-modified ecosystems, which can encompass areas of 10 to 100s square kilometers.
Land-Use Planning	The systematic assessment of land potential and alternatives for optimal land uses and improved economic and social conditions through participatory processes that are multi-sectoral, multi-stakeholder and scale-dependent. The purpose of land-use planning is to support decision-makers and land users in selecting and putting into practice those land uses that will best meet the needs of people while safeguarding natural resources and ecosystem services for current and future generations.
Native Species	A species that occurs naturally in a region.
Natural Regeneration	The renewal of a forest crop by self-sown seeds, coppice and/or root suckers.
Non-Wood Forest	Any forest product except timber and other wood (e.g., wood fuel), including products from trees, other plants,

Terminologies	Description /definition of terminologies
Product	and animals, in a forest area.
Nutrient Cycle	A natural process in which nutrients, mainly minerals, are taken up from the soil, used for plant growth and, once the plant dies, returned to the soil through decomposition processes.
Permanent Forest Estate	Land, whether public or private, secured by law and kept under permanent forest cover. This includes forested land secured for the purpose of production of timber and other forest products, protection of soil and water, conservation of biodiversity, or land intended to fulfil a combination of these functions.
Planted Forest	A forest stand that has been established by planting or seeding.
Primary Forest	Forest which has never been subject to human disturbance, or has been so little affected by hunting, gathering and tree-cutting that its natural structure, functions and dynamics have not undergone any changes that exceed the elastic capacity of the ecosystem.
Reforestation	The re-establishment of forest (replanting of trees) and understory plants on a site immediately or more recently (few decades) deforested land or later after the removal of natural forest cover (i.e. converting recently non-forested land in to forest).
Resilience	The capacity of an ecosystem to recover from perturbations (biotic and abiotic). The ability of an ecosystem to withstand any disturbance and bounce back from such disturbance events.
Restoration	An intentional activity that accelerates the recovery of an ecosystem with respect to its health, integrity and sustainability.
Secondary Forest	Woody vegetation regrowing on land that was largely cleared of its original forest cover (e.g. carried less than 10% of the original forest cover). Secondary forests commonly develop naturally on land abandoned after shifting cultivation, settled agriculture, pasture, or failed tree plantations.
Silviculture	The art and science of producing and tending forests by manipulating their establishment, species composition, structure and dynamics to fulfil given management objectives.
Stakeholders	Any individuals or groups directly or indirectly affected by, or interested in, a given resource (in this case forest).
Shifting Agriculture	Used here as a synonym for shifting or swidden cultivation. The burning and cleaning of forest vegetation and subsequent planting of agricultural crops for short periods (e.g. 1–5 years) followed by abandonment. Refers to a technique of rotational farming in which land is cleared for cultivation (normally by fire) and then left to regenerate after a few years.
Succession	Progressive change in species composition and forest structure caused by natural processes over time.
Sustainable Forest Management	The process of managing forest to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undesirable effects on the physical and social environments.
Sustained Yield	The production of forest products in perpetuity, ensuring that the harvesting rate does not exceed the rate of replacement (natural or artificial) in a given area over the long term.
Tenure	Agreement(s) held by individuals or groups, recognized by legal statutes and/or customary practice, regarding the rights and duties of ownership, holding, access and/or usage of a particular land unit or the associated resources (such as individual trees, plant species, water or minerals) therein.
User Rights	The rights to the use of forest resources as defined by local custom or agreements or prescribed by other entities holding access rights. These rights may restrict the use of particular resources to specific harvesting levels or specific extraction techniques.
Woodlot	A small area of trees or small forest stands up to several hectares in size that allow some productive and protective management. It is a restricted area of woodland usually privately maintained as a source of fuel, posts, and lumber or to provide wood for building things.

NABU Ethiopia, The Nature and Biodiversity Conservation Union Ethiopia, a local non-profit CSO in Ethiopia, is dedicated to nature and biodiversity conservation as well as nature-based and environmentally friendly livelihood development. NABU Ethiopia's overall goals are in line with NABU Germany's and the CSO commits itself to the values, spirits, and guiding principles of NABU Germany. NABU Ethiopia's vision is a world in which humans and nature coexist in harmony, with healthy ecosystems, biological diversity, sound ecosystem services and climate resilient systems. Working areas cover the empowerment of conservation partners, climate mitigation and adaptation, sustainable livelihoods and restoration of ecosystems and natural resources.

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For more information about the project visit **https://forestsforfuture-ethiopia.com**



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