german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

World Vision

FARMER MANAGED NATURAL REGENERATION (FMNR)

A workshop manual for practitioners

2024

Acknowledgements

Farmer Managed Natural Regeneration (FMNR) addresses the global challenges of our world today. Through FMNR, people who are suffering from the effects of degraded land and climate change are empowered to restore ecosystem health. It is thus an approach that contributes to improving the lives of millions of children and their communities around the world. With such an important global contribution, it is only appropriate that this FMNR Workshop Manual has been developed through the efforts of several stakeholders, whom World Vision Germany gratefully appreciates.

We thank the German Federal Ministry for Economic Cooperation and Development (BMZ) for its focus on combating climate change, restoring ecosystems and preserving biodiversity. The political conviction and corresponding provision of funding are vital for the effective initiation and replication of landscape restoration efforts. It is indeed such funds from BMZ which have been passed onto us by GIZ, which we are truly grateful to have as a partner for spreading FMNR on a global scale. Specifically, it is in thankful partnership with GIZ's Forest4Future programme under the FMNR Scale-Up Project in Ethiopia and Kenya, that this FMNR Workshop Manual has been developed.

At World Vision Germany, our deepest appreciation goes towards Flavia Marà, for her excellent overall coordination, technical oversight as well as written contributions throughout the development of this manual. Special thanks to Simon Wittich for his key role in conceptualizing the training concept and initiating the development of the workshop manual. Many thanks also go to Liyanda Seither, for his coordination of the aforementioned project, as well as process guidance and support in the review of the FMNR Workshop Concept and Manual.

Within the World Vision Partnership, we extend our heartfelt gratitude to World Vision Kenya and World Vision Ethiopia for generously sharing their vast wealth of expertise in FMNR programming, which greatly enriched this manual. Particular appreciation goes to Adisu Abebe and Emily Ouko from World Vision Ethiopia and Kenya, respectively, who managed the FMNR Scale-Up Project. In their responsibility, they led the technical and content-related contributions of their respective offices and technical teams, which are likewise appreciated. Equally important, they facilitated the trialling of the FMNR Workshop Concept, upon which this manual is based, during multiple FMNR trainings. This would not have been possible without the cooperation of relevant FMNR programmes in both countries. Utmost thanks is thus given to relevant programmes which include EU-funded Regreening Africa, DFAT-funded Central Rift Farmer Managed Natural Regeneration Scale-Up Project (CRIFSUP), World Bank-supported Humbo Community Managed Natural Regeneration Forest Project, Climate Asset Management-funded Restore Africa and SIDA-funded Integrated Management of Natural Resources for Resilience in Arid and Semi-Arid Lands (IMARA).

A special vote of thanks is extended towards World Vision Australia. This FMNR Workshop Manual draws from, refers to and now seeks to supplement the vast collection of FMNR resources which have been developed through their FMNR competencies and programmes. Technical guidance and support provided specifically by Alice Muller is particularly appreciated.

Finally, we extend our heartfelt gratitude to the FMNR champions, community members and FMNR training providers who tirelessly advocate for the scaling-up of FMNR, as an approach to restore and preserve ecosystem health. You are the driving motivation behind the development of this workshop manual, which ultimately aims to share your wealth of knowledge with a broader network of FMNR stakeholders, future trainers and practitioners. Thank you for inspiring and facilitating the growth of FMNR practices in our global community.

Martin van de Locht

Martin van de Locht,
Head of International Programmes,
World Vision Germany

Authors:
- Flavia Marà, Technical Advisor Climate Action and Environment, World Vision Germany
- Adisu Abebe, Climate Change & Environmental Specialist, World Vision Ethiopia
- Emily Ouko, Manager – GIZ FMNR Scale up Project, World Vision Kenya

Review team:
- Alemayehu Markos, FMNR Movement Catalyst Project Manager, World Vision Ethiopia
- Workneh Edesa Huriso, Climate Change and Environment Projects Coordinator, World Vision Ethiopia
- Lavenda Odere, Natural Resource Management Coordinator, World Vision Kenya
- Liyanda Seither, Senior Coordinator Africa / Deputy Team Leader, World Vision Germany

Additional technical guidance:
- Alice Muller, Senior Monitoring and Evaluation Advisor (FMNR Scale-Up), World Vision Australia
- Yukiko Yamada Morovic, Technical Director, Environmental Sustainability and Climate Action (ESCA), World Vision International

Copyeditor: Katie Fike

Design:
- Daniel Ron Berro, Graphic Designer, Creative Services, World Vision International Global Center Manila Office

World Vision Deutschland e. V.
Am Zollstock 2-4 • 61381 Friedrichsdorf
phone: +49 6172 763-0
info@worldvision.de

Berlin office
Luisentraße 41 • 10117 Berlin

worldvision.de

Foreword

It is our pleasure to introduce the Farmer Managed Natural Regeneration (FMNR): A workshop manual for practitioners. FMNR is an approach that can aid in the restoration of ecological integrity amidst the complexities of land degradation. This practice, based on traditional knowledge and grassroots action, aims to empower farmers and practitioners to revitalise ecosystems and restore degraded landscapes using simple yet effective techniques. The manual is a comprehensive guide for facilitators, providing them with the knowledge, skills, and tools needed to successfully implement FMNR initiatives. The manual is not only technically sound, but it also embodies a spirit of collaboration, inclusivity, and empowerment. It reflects the collective wisdom of farmers, practitioners, and researchers who have come together in pursuit of a shared vision

Yukiko Yamada Morovic,
Technical Director, Environmental Sustainability and Climate Action (ESCA),
World Vision International

Contents

Acknowledgements 02
Foreword 04
Contents 05
List of tables and figures 06
1. Introduction 09
2. Purpose and target group of the manual 11
    2.1 Who is this manual for? 11
    2.2 Objectives of this manual and workshop 12
3. Didactic principles of the workshop 13
4. Basics of the FMNR workshop 15
    4.1 Group size and composition 15
    4.2 Workshop venue 16
    4.3 Workshop schedule 17
5. Learning units and modules 19
    Learning unit 1: Workshop opening 19
        Module 1.1: Welcome and introduction 20
        Module 1.2: Didactic principles and rules of the workshop . . . 21
        Module 1.3: Workshop content and learning objectives . . . 22
        Module 1.4: Pre-workshop evaluation 23
    Learning unit 2: Environmental degradation, deforestation and natural resource management 24
        Module 2.1: Linkage diagrams on environmental degradation, deforestation and natural resource management (participatory group reflection exercise) 25
        Module 2.2: Basics of environmental degradation, deforestation and natural resource management 32
        Module 2.3: Introduction to community-based forest and landscape restoration (FLR) 35
    Learning unit 3: Farmer Managed Natural Regeneration (FMNR) . . . 37
        Module 3.1: Introduction to FMNR 38
        Module 3.2: FMNR as a technical practice 42
        Module 3.3: FMNR as a community development process . . . 45
        Module 3.4: Scope for applying FMNR. 48
    Learning unit 4: Workshop closing 51
        Module 4.1: Wrap-up and post-workshop evaluation 51
References 56
Annexes 57
Appendix 59

List of tables and figures

Tables

Table 1 Adult learning principles and implications for training . . . 13
Table 2 Indicative workshop schedule 17
Table 3 Module 1.1 Overview 20
Table 4 Module 1.2 Overview 21
Table 5 Module 1.3 Overview 22
Table 6 Module 1.4 Overview 23
Table 7 Module 2.1 Overview 29
Table 8 Module 2.2 Overview 34
Table 9 Module 2.3 Overview 36
Table 10 Module 3.1 Overview 40
Table 11 Module 3.2 Overview 44
Table 12 Module 3.3 Overview 47
Table 13 Module 3.4 Overview 50
Table 14 Module 4.1 Overview 51

Figures

Figure 1 Learning unit 1: Workshop opening 19
Figure 2 Learning unit 2: Environmental degradation, deforestation and natural resource management 24
Figure 3 Learning unit 3: Farmer Managed Natural Regeneration (FMNR) . . 37
Figure 4 The FMNR technical practice components. 42
Figure 5 FMNR core components, including four practices (top half-circle) and three process components (bottom half-circle) 45
Figure 6 Learning unit 4: Workshop closing 51

List of acronyms

CGIAR	Consultative Group for International Agricultural Research
CIFOR	Center for International Forestry Research
FAO	Food and Agriculture Organization (of the United Nations)
FLR	Forest and landscape restoration
FMNR	Famer Managed Natural Regeneration
GEF	Global Environmental Facility
IPPC	The Intergovernmental Panel on Climate Change
IUCN	United Union for Conservation of Nature
NRM	Natural resource management
UNEP	United Nations Environment Programme

Glossary of terms

Action research: Action research is 'research on the conditions and effects of various forms of social action and research leading to social action' that uses 'a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action'. 'Action research is an experiment in design, and involves implementing an action to study its consequences.' (Hall et al., n.d.).

Adaptive capacity: The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities or to respond to consequences (IPCC, 2018).

Biodiversity: The variety of microorganisms, plant and animal life globally or in a specific place. It also includes genetic diversity and ecosystem diversity – that is, the different interactions between organisms, air, water and soil. High biodiversity means a healthy environment.

Climate change: A global change in weather patterns over a long period of time. This can cause weather extremes such as flooding and droughts or exacerbate other issues such as land degradation and desertification.

Conservation: The act of preserving, guarding, protecting and sustainably using the environment, including for biodiversity and maintaining natural resources and ecosystem health.

Ecosystem: The complex network of biological components, including communities of living organisms (plants, animals, birds, fish, microorganisms), and how they interact with each other and with their physical environment – including air, water, sunlight and soil.

Ecosystem services: The capacity of the environment to provide benefits (such as clean air, water, food, oxygen, soil fertility, biodiversity and nutrients) for human benefits and to provide a reasonable quality of life.

Landscape: The natural and physical attributes of land, together with air and water. Landscape is an integrative concept which is applied to a group of resources (soils, vegetation, waterways, wetlands, biodiversity and so on) within a spatial area. It also incorporates the associated human values (for example, communities, infrastructure and governance). The extent of the spatial area may be defined by biophysical and/or perceptual/associative characteristics but often relates to 'catchments' or locations/areas/units that share particular landscape attributes.

Regeneration: Regeneration is a part of restoration but with focus on regreening through living tree stumps (underground forest).

Restoration: The process of returning something to its former good condition or position. Ecosystem or environmental restoration is the process of reversing the degradation of ecosystems to improve their productivity and capacity to meet the needs of society.

1. INTRODUCTION

The natural environment is a critical factor for human life. While virtually no individual around the globe is fully independent from natural resources, two in three people in the tropics across Africa, the Asia-Pacific region, and the Americas directly depend on natural resources for their livelihoods: as a source of food, drinking water, energy, housing material and much more (Fedele et al., 2021). The strong reliance on natural resources makes them especially vulnerable to environmental degradation in the wake of climate change, natural resource exploitation (e.g., deforestation) and unsustainable land use practices. Degraded landscapes prevent communities from sufficiently growing food, gathering water or accessing firewood. These communities are also more vulnerable to climate-related disasters and natural resource-based conflict. This negatively impacts the communities' ability to develop sustainable livelihoods, resulting in more fragile communities and more vulnerable families and children (World Vision International, 2023).

Combating and reversing land degradation is imperative to ensure a secure and sustainable future for rural communities. All over the world, these communities are transforming their lives and their land through the use of Farmer Managed Natural Regeneration (FMNR). FMNR is a concept, approach and practice to enable nature-dependent land users (communities, families, individuals) to break the vicious cycle of unsustainable natural resource management, land degradation and deteriorating living conditions (e.g., increased poverty, food insecurity). FMNR promotes a natural form of landscape rehabilitation based on the selection, protection and systematic pruning of existing tree shrubs with active root systems. In this way, FMNR is a low-cost solution that requires minimum technical knowledge and skills and thus is a realistic option even for resource-constraint land users, such as vulnerable and poor farmers, pastoralists and foresters. It can be applied on various landscapes (e.g., farmland, pastureland, forest land) and has positive implications for the environment, such as improved tree and vegetation coverage, microclimate and soil structure. FMNR contributes to a healthy environment with favorable conditions for horticultural production, animal husbandry, forest management and mixed forms of farming.

In many nature-dependent communities, especially in those being most affected by land degradation, deforestation and climate change, FMNR with its systematic and comprehensive approach is still fairly new or unknown. Introducing FMNR to a community, therefore, requires opportunities to learn about, reflect on and practice the technical steps of FMNR (see Module 3.2). This is usually done in the form of a theoretical training workshop in combination with a practical demonstration of FMNR (e.g., on a private or community-based demonstration field).

Despite a broad spectrum of existing learning materials on FMNR (from World Vision and other FMNR implementers), there is a lack of resources for implementing trainings with potential FMNR users. Available materials have been limited to high-level guidance, whereas a comprehensive manual with a detailed training concept (Appendix A), facilitation guidelines and learning materials was still missing. This manual has been developed to fill this gap and to serve as a source book for three general audiences:

- facilitators conducting FMNR training with potential FMNR practitioners
- technical stakeholders involved in the implementation of FMNR interventions
- all those interested in learning more about the FMNR concept and approach.

After this introductory section (Section 1), the manual is structured as follows:

Section 2 presents the objectives of the manual and its target audience.

Section 3 outlines the didactic approach recommended for conducting the workshop.

Section 4 provides guidelines on the group size and composition of training participants, how to identify and select a suitable venue and how to plan a schedule for the workshop.

Section 5 is the main body of this manual. It contains four learning units organised into several modules which feature detailed step-by-step guidelines for facilitators, as well as corresponding learning materials. The first learning unit is an introduction to the workshop and its approach. The second unit provides basic knowledge about environmental degradation, deforestation and natural resource management, which encourages participants to reflect on and understand their interlinkages. This process is supported by the linkage diagram tool which participants learn how to use. In the third learning unit, participants become familiar with the concept and approach of FMNR and understand its technical practices, community development process and its scope of application. Finally, the fourth and last unit wraps up and evaluates the workshop, and supports participants to reflect on what they have learnt.

2. PURPOSE AND TARGET GROUP OF THE MANUAL

This manual provides a comprehensive structure, step-by-step facilitation guidelines and learning content (including learning materials) for a theoretical, classroom setting workshop on FMNR with potential FMNR adopters such as farmers, pastoralists and other land users. The learning methods and contents outlined in this manual have been developed from actual FMNR trainings and tested across different agro-ecological, livelihoods and cultural contexts.[1] When conducting the workshop, it is recommended to combine it with a practical on-farm demonstration of core FMNR techniques (see Module 3.2).

2.1 Who is this manual for?

This manual is primarily intended for technical stakeholders who plan to conduct a training on FMNR targeting potential FMNR users such as farmers, pastoralists and other land users. This includes but is not limited to, technical staff from government authorities, public development agencies, UN agencies, local and international non-governmental organisations, community-based organisations, research for development institutes (e.g. CGIAR, Consultative Group for International Agricultural Research) and other potential implementers. In general, the manual does not assume any prior knowledge of FMNR and is therefore suitable for both experienced professionals and those planning an FMNR training for the first time. In addition, the manual can also be used as a self-learning tool on FMNR.

FMNR training with practitioners. © World Vision Kenya

1 The learning methods have been tested with both pastoralist and farming communities whose livelihood activities revolve around keeping livestock and crop farming, respectively. The methods have also proved viable in afforestation of forest landscapes, grazelands and even farmlands. In arable land, arid and semi-arid contexts, the learning methods have yielded impressive changes with great potentials of reversing landscape degradation.

2.2 Objectives of this manual and workshop

This manual serves as a comprehensive guiding document for facilitators of a workshop on FMNR with potential FMNR users. The contents include the concept for a one-day training (Appendix A), a potential workshop schedule, concrete training modules (each supported with background information and facilitation guidelines as well as a list of materials needed) and the structure for a self-assessed pre- and post-workshop evaluation of relevant knowledge, skills and mindsets. This manual, therefore, aims to equip workshop facilitators with all relevant information, guidelines and materials to plan, design, conduct and evaluate a workshop on FMNR with potential FMNR adopters. The manual also suggests options on how to adapt the workshop design to the respective local context.

The workshop's overall objective is to introduce nature-dependent communities and land users to the concept and practice of FMNR. The workshop focuses on theoretical learning aspects of FMNR and should be combined with a practical on-field demonstration and/or training. The main objectives of the workshop are that participants:

- learn about and reflect on the concepts of environmental degradation, deforestation and natural resource management in their personal life and work context
- learn about and reflect on FMNR as a natural and low-cost form of landscape restoration as part of a sustainable approach for the management of natural resources in their personal life and work context
- understand the different components of and key steps to establishing FMNR within the community and/or household
- are aware of the benefits of FMNR for their personal life and work context in rural areas.

In essence, the workshop intends to provide a platform for learning, reflection and discussion on FMNR and underlying concepts such as land degradation and deforestation. Participants should be an active part of the workshop and be able to manage and control their process of learning (see also Section 3).

Karisis (centre) is joined by her friends and local dwellers of Narok County in Kenya to plant trees to help tackle climate change that has affected the region. © World Vision Kenya

3. DIDACTIC PRINCIPLES OF THE WORKSHOP

The methods in this workshop were derived from common adult learning principles [2] (see Table 1) and existing facilitation guidance on FMNR workshops from World Vision. [3] In this regard, the workshop design is based on a number of didactic principles that facilitators may share and agree on with participants at the onset of the workshop (see Module 1.2).

Table 1. Adult learning principles and implications for training

Adult learning principle	Implication for training
Adults learn best when they perceive learning as relevant to their needs	• Provide 'real life' situations and emphasise the application of learning to real problems • Identify learners' needs and what is important to them
Adults learn by doing and by being actively involved in the learning process	• Provide activities that require active participation of learners • Provide activities that involve the learners as whole people: their ideas, attitudes, feelings and physical being
Adults have unique learning styles; they learn in different ways, at different rates and from different experiences	• Use a variety of training techniques • Establish an atmosphere of respect and understanding of differences
Participants bring relevant and important knowledge and experiences to the training	• Provide opportunities for sharing information • Discuss and analyse participants' experiences • Use participants as a resource and encourage them to participate and share their experiences

Source: Fischer et al., 2019.

These principles are adopted for this training manual as follows:

Principle 1: Participants are responsible for their learning

The FMNR workshop is conceptualised as a journey of discovery based on self-reflection, discussion and mutual learning. The role of facilitators is not that of a mere lecturer, but rather a moderator that introduces participants to new perspectives, ideas and challenges. Participants are responsible for their own learning during the workshop. This implies that facilitators are transparent about the learning objectives and methods of the workshop, while also providing room for participants to define their own learning objectives (e.g., Module 1.3) and share reflections, questions and their own experiences (e.g., through regular question and feedback opportunities during or at the end of each module). While participants are responsible for taking an active part in the workshop, facilitators should also plan for a suitable environment and objectively guide discussions to ensure the workshop remains within the confines of its objectives and focuses on achieving its intended goal (see Modules 4.1 and 4.2).

2 For more information, please refer to Chapter 2 of the International Institute of Tropical Agriculture's Gender analysis in farming systems and action research: A training manual, https://cgspace.cgiar.org/items/ef277e44-67d1-4bd0-b506-475490558d14.
3 See World Vision Australia's FMNR Workshop: Guidelines for Facilitators, http://fmnrhub.com.au/wp-content/uploads/2014/06/FMNR-Workshop-Facilitator-Guidelines.pdf.

Principle 2: Mutual respect

Mutual respect is a precondition for successful learning during the workshop. This implies mutual respect between workshop facilitators and participants as much as among participants themselves. A positive and appreciative attitude is needed to encourage participants to share their personal concerns, experiences and questions, and enable constructive dialogue and learning.

Principle 3: Mix of different learning formats

Individuals have unique learning styles and tend to prefer different learning formats and techniques. This means that facilitators should combine different learning formats (e.g., lecture, group work, individual exercise) and materials. Wherever suitable, facilitators may use short video clips at strategic points.

Principle 4: Reflection on the learning progress

Regular reflection on the learning progress during the workshop helps to understand the effectiveness of the workshop design. It also allows facilitators to respond to specific needs and preferences of a specific workshop group. Facilitators are therefore advised to conduct a brief evaluation at the onset and end of the workshop (see Modules 1.4 and 4.1), include brief wrap-up sessions on the contents and key learnings at specific points in the workshop, and allow participants to raise questions and provide feedback. Balance is needed to make sure that facilitators remain within the planned time for the workshop.

Principle 5: Networking

Workshop participants are expected to also use the workshop to connect and network with other participants. Facilitators may introduce the idea of forming a network (e.g., a WhatsApp group) and encourage participants to connect as well as plan for follow-up exchange after the workshop.

4. BASICS OF THE FMNR WORKSHOP

This section captures a few aspects that workshop facilitators are advised to consider in the planning phase of the workshop. This involves the definition of a reasonable group size and group composition, the identification and selection of a suitable venue, and the planning of a workshop schedule.

4.1 Group size and composition

When planning a workshop on FMNR, it is useful to make some considerations about the size and composition of the group of participants. The workshop presented in this manual encourages active participation, which means that the group size and composition should be determined so that each participant can actively participate in the workshop. In preparation for the workshop, facilitators should reflect on potential factors and criteria for the size and composition of the participant group to allow for active participation during the workshop.

As for group size, the workshop has been conducted with group sizes of 20 to 30 participants. However, group sizes may vary depending on the training context (e.g., when training a connected group of people such as a producer group), the available budget. as well as time and human resources. In general, active participation tends to be easier in smaller groups, while larger groups often limit the scope for direct involvement of all participants.

FMNR training participants and facilitator. © World Vision Ethiopia

The composition of the workshop group may vary across different contexts and for different training purposes. As the establishment of FMNR is a community-based process, it is generally advisable to ensure that key social and livelihoods groups (e.g., farmers, pastoralists and foresters) within a given community are represented in the workshop. This also includes a balanced representation of women and men. At the same time, workshop facilitators need to consider potential negative group dynamics resulting from unequal power relations or cultural norms (e.g., based on gender, age, social rank, livelihoods background). Wherever possible, facilitators should therefore arrange workshop groups in a way that minimises the risk of negative group dynamics. [4]

Checkbox for facilitators

- ✓ Have you included people from key social groups and livelihoods backgrounds in the workshop group?
- ✓ Have you defined clear criteria for the group size and composition that encourages and allows active participation of each participant?
- ✓ Does the group size allow each participant to take an active part in the workshop?
- ✓ Have you considered potential negative group dynamics and unequal power relations (e.g., in relation to gender, age, social rank, livelihoods) that could prevent active participation?

4.2 Workshop venue

The workshop can be conducted in various locations. In most cases, the actual workshop venue will largely depend on the local conditions in the respective context. In the past, trainings have been conducted at communal buildings (e.g., schools, community centers, youth clubs, church) as well as in outdoor locations such as village squares, market spaces and other meeting points. While these are examples of potential workshop venues, it is more important to ensure that the chosen location meets some minimum criteria.

Workshop facilitators should consider the following aspects, when identifying a suitable workshop venue:

- **Accessible:** It is important to select a venue that is easily accessible for all participants. While this would include physical as much as social accessibility, workshop facilitators should also consider the differentiated mobilities and other access barriers of different participant groups (e.g., women, men, youth, elderly people, people living with disabilities). [5] Proximity of the venue to the target group as well as participants' mobilities should be considered to allow for timely and safe ('Do No Harm' principle [6]) arrival to and departure from the workshop. Challenges in accessing the workshop venue can result in absence and non-participation.
- **Group work:** The venue should allow for the carrying out of exercises in small groups. This is needed to provide a suitable environment for some of the learning modules (see Section 5). Workshop facilitators should therefore make sure that group work can be conducted in the respective workshop location.

4 When planning for only one training in a community, representation of different social and livelihoods groups remains important, despite an increased risk of negative group dynamics, since all groups are to be reached during the one training. In cases of multiple FMNR trainings in the same community, facilitators could also contemplate the advantages of separate trainings for women and men as well as different land user groups (e.g., farmers, pastoralists, foresters). The opportunity for active participation in the workshop should form the leading principle in any case.

5 This is also especially important when combining a training that includes participants from different communities. In this case, if not sufficiently considered, the physical distance to the workshop venue as well as social factors may prevent participation of some participants.

6 The 'Do No Harm' principle is a concept or approach for conflict-sensitive planning and implementation wherever relevant. Negative consequences and unintended effects of development cooperation and humanitarian aid should be identified, avoided and mitigated at an early stage.

- **Learning conditions:** It is also advisable to conduct the workshop in a calm and comfortable location in order to avoid external disruptions and provide a favorable learning environment.

Checkbox for facilitators

- ✓ Was the workshop venue chosen with regard to easy access for all participants?
- ✓ Have you considered the differentiated access barriers (both physical and social) of different participant groups such as women, men, youth and elderly people?
- ✓ Is the workshop venue suitable for the conduction of group work?
- ✓ Is the workshop venue located in a calm and well-tempered environment?

4.3 Workshop schedule

The workshop concept and schedule outlined in this manual under Table 2 was developed from various FMNR trainings in several different contexts. The structure and contents of this manual have been developed in alignment with the outlined indicative schedule. The schedule has been proven effective in introducing FMNR to a new group of potential users and creating dialogue and reflection on the management of tree products and other natural resources within a community. At the same time, the workshop schedule and content described below should be considered a suggested potential schedule, which users of this manual could also adapt according to the training purpose and target group. The workshop schedule should therefore not be seen as a fixed structure and may be adapted to specific needs.

Table 2. Indicative workshop schedule

Time	Unit/Module
08:30–09:00	Registration
	Learning unit 1: Workshop opening
09:00–09:15	1.1 Welcome and introduction
09:15–09:20	1.2 Didactic principles and rules of the workshop
09:20–09:30	1.3 Workshop content and learning objectives
09:30–09:45	1.4 Pre-workshop evaluation
	Coffee/tea break
	Learning unit 2: Environmental degradation, deforestation and natural resource management
10:00–11:15	2.1 Linkage diagrams on environmental degradation, deforestation and natural resource management
11:15–11:45	2.2 Basics of environmental degradation, deforestation and natural resource management
11:45–12:15	2.3 Introduction to community-based forest landscape restoration (FLR)
	Lunch

	Learning unit 3: Farmer Managed Natural Regeneration (FMNR)
13:00–14:00	3.1 Introduction to FMNR
14:00–14:15	3.2 FMNR as a technical practice
14:15–14:45	3.3 FMNR as a community development process
14:45–15:15	3.4 Scope for applying FMNR
	Coffee/tea break
	Learning unit 4: Workshop closing
15:30–16:15	4.1 Wrap-up and post-workshop evaluation
16:15	End of workshop

5. LEARNING UNITS AND MODULES

This section constitutes the main part of the FMNR workshop manual. It comprises detailed descriptions of the four learning units. Each learning unit consists of several modules. At the beginning of each training module a summary table provides the facilitator with an overview of the approximate duration, learning objectives and topics. It also includes information relevant to the preparatory phase (e.g., preparation materials and methods to be used). This overview should help users of this manual to quickly grasp key aspects and considerations of the respective training module. Step-by-step instructions and guidelines support the facilitator in implementing the module. For modules that address concepts and practices on FMNR (in Learning units 2 and 3), a theoretical background and suggestions for further reading are provided to help the facilitator prepare for the workshop. Furthermore, most of the modules include an additional section called 'Facilitator's notes,' which outlines general and experience-based remarks to support the facilitators in conducting the workshop.

Learning unit 1: Workshop opening

The first learning unit contains four modules: (1) a welcome and introductory session, (2) a presentation of the didactic principles and rules that will be followed during the workshop, (3) an introduction to the content of the workshop and the learning objectives, and (4) a pre-workshop evaluation.

Figure 1 Learning unit 1: Workshop opening

Module 1.1: Welcome and introduction

Table 3. Module 1.1 overview

Overview	Welcome and introduction
Time	15 minutes
Learning objectives	The participants ➢ know the main thematic focus of the workshop ➢ and workshop facilitators get to know each other
Topics	◊ Welcome ◊ Getting to know each other
Preparation	❋ Prepare a welcoming cover page on a flip chart ❋ Before participants arrive, arrange the chairs in a semi-circle for this introductory session
Materials	☼ Flip chart ☼ Marker pens
Methods	✳ Presentation ✳ Plenary discussion
Remarks	✓ Make sure everyone introduces themselves

Facilitation, steps and guidelines

Step 1: Start the session by inviting the participants to sit in the chairs arranged in a semi-circle. Welcome them, introduce yourself and allow other facilitators to introduce themselves. If there is a partner organisation, or another institution involved, invite their representatives (if present) to open the workshop.

Step 2: Explain the general reason and the thematic focus of this workshop. If the workshop is conducted within the framework of a project, briefly describe the project background.

Step 3: Considering the cultural context and group size, invite each participant to briefly introduce her- or himself (name, home community, etc.). Ask participants to continue one by one.

Step 4: Thank the participants after they have finished their self-introduction and lead over the next module.

Facilitator's notes:

- Depending on the cultural context of the group, you may include a short moment of prayer in the programme. You could ask the group if any participant would like to lead the prayer.
- For the round of introduction, you could ask each participant a fun fact or an icebreaker question to help them more comfortably interact with each other during the workshop.
- Consider writing down the basic information that participants are required/ expected to include in their introduction (e.g., name, organisation/place, experience with FMNR, etc.) on a flip chart if possible.

Module 1.2: Didactic principles and rules of the workshop

Table 4. Module 1.2 overview

Overview	Didactic principles and rules of the workshop
Time	15 minutes
Learning objectives	The participants ➢ are aware of basic didactic learning principles for training applied during this workshop ➢ are aware of basic behaviour rules during the workshop
Topics	◊ Didactic learning principles and rules
Preparation	❋ Prepare cards with main didactic learning principles and rules to stick on the flip chart (which can be hung up on the wall in the training room)
Materials	☼ Flip chart ☼ Cards ☼ Pens
Methods	✳ Presentation ✳ Plenary discussion

Facilitation, steps and guidelines

Step 1: Introduce the main didactic learning principles and rules of conduct for the workshop, e.g., mutual and experimental learning, reflection and networking. Explain the principles and that following them supports participatory methods that build on the participant's own experiences and perspectives.

Step 2: Ask participants whether there are any questions or comments related to the principles and rules and provide feedback (if needed). If participants would like to add additional principles or rules to the suggested list, write them on a blank card and stick it on the flip chart. Agree with the participants on the didactic principles.

Step 3: Close the module and continue with the next one.

Facilitator's notes:

Presenting the didactic principles helps to introduce the concept of a learning environment where testing and experimentation can take place effectively. This works closely with the appreciation of 'errors' as learning opportunities (see Section 3).

Module 1.3: Workshop content and learning objectives

Table 5. Module 1.3 overview

Overview	Workshop content and learning objectives
Time	15 minutes
Learning objectives	The participants ➢ are aware of the scope and content of the workshop ➢ have shared their learning objectives and expectations (if applicable) ➢ and workshop facilitators have agreed on the learning objectives of the workshop
Topics	◊ Scope and content ◊ Learning objectives
Preparation	❋ Prepare a flip chart with the overview of the workshop scope and content ❋ Prepare a flip chart with the summary of the learning objectives of participants ❋ Prepare a flip chart with the workshop schedule
Materials	☼ Flip chart ☼ Marker pens ☼ Cards ☼ Pens
Methods	✶ Presentation ✶ Plenary discussion

Facilitation, steps and guidelines

Step 1: Explain the purpose of this module, i.e., the introduction of workshop content, learning objectives and schedule.

Step 2: Present the scope and content of the workshop.

Step 3: Give participants time to comment and ask questions and invite them to share their expectations and learning objectives. Thank participants for sharing their views.

Step 4: Outline the workshop schedule. Go through it with the participants and get their agreement.

Step 5: Close the module and lead into the last module of this learning unit.

Facilitator's notes:

- The facilitator(s) may write down participants' contributions to the learning objectives and expectations on blank cards that can be pinned on the flip chart.
- Alternatively (also considering literacy), participants may write down their additional contributions themselves, which can be organized in alignment with the presented objectives.

Module 1.4: Pre-workshop evaluation

Table 6. Module 1.4 overview

Overview	Pre-workshop evaluation
Time	15 minutes
Learning objectives	The participants ➢ have assessed their knowledge and capacities on FMNR before the workshop
Topics	◊ Self-assessment of previous knowledge and capacities on FMNR
Preparation	❋ Prepare the pre-workshop evaluation questionnaire ❋ Before the training, print a copy of the pre-workshop evaluation form for each participant (Appendix B)
Materials	☼ Pre-workshop evaluation ☼ Pens
Methods	✳ Evaluation form/questionnaire
Remarks	✓ Those participants whose literacy levels restrict the understanding and completion of the form should be supported by the facilitators of the session

Facilitation, steps and guidelines

Step 1: Present the pre-workshop evaluation questionnaire to participants to assess their existing knowledge and capacities on FMNR. The self-assessment allows participants to identify their competencies, gaps and learning needs at the start of the training. Inform the group that a similar self-assessment form will be distributed at the end of the training. This will allow participants to evaluate their own development and assess the quality of the training. Distribute the first pre-workshop questionnaires.

Step 2: Collect the questionnaires when participants have completed them. Thank the participants and close the first unit.

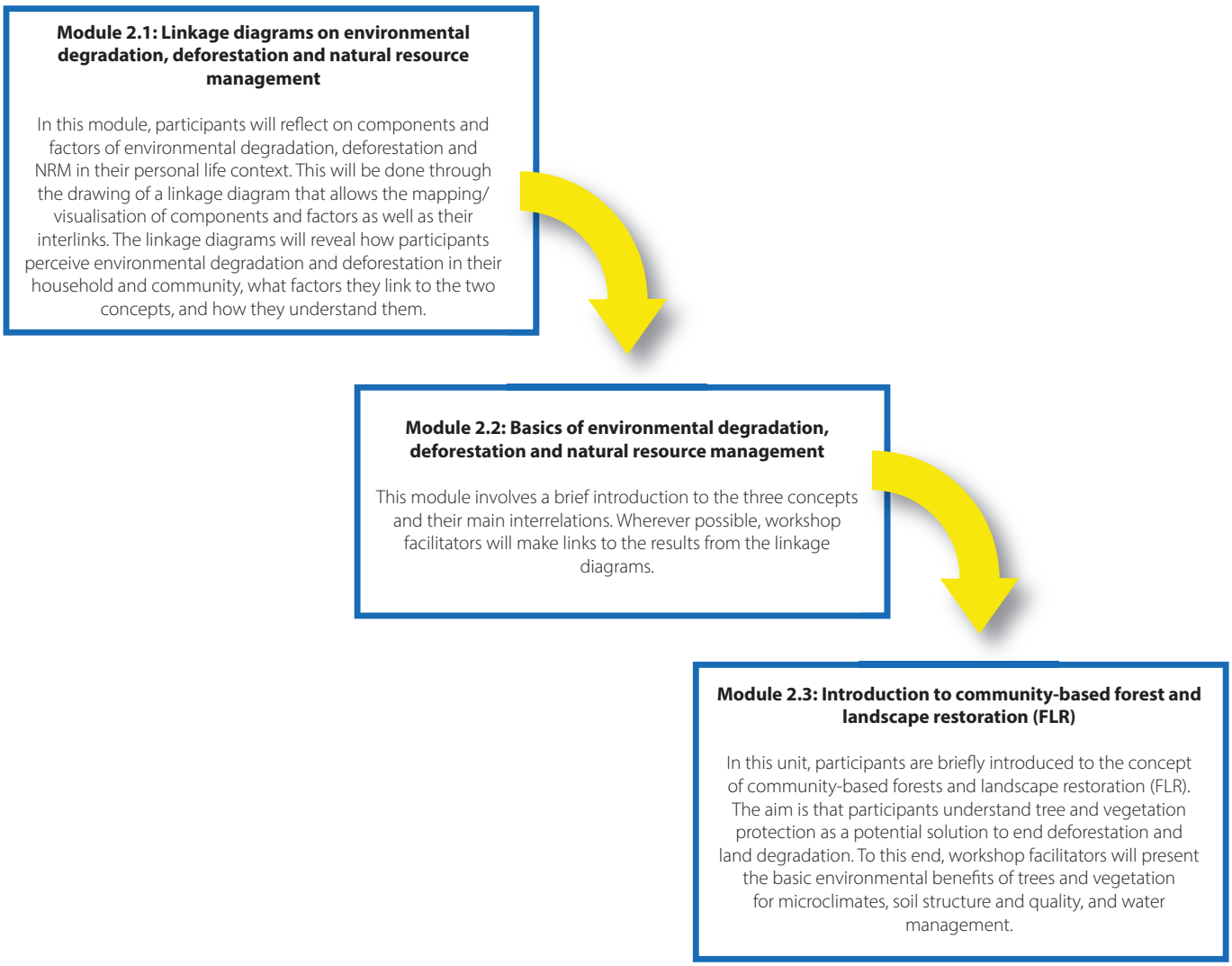
Facilitator's notes:

- The self-assessment form should be short and focus on the relevant aspects of the training.
- If illiterate participants are present, the facilitator(s) should assist them in filling in the pre-workshop questionnaire.

Learning unit 2: Environmental degradation, deforestation and natural resource management

The second learning unit consists of three modules: (1) a participatory group reflection exercise on the concepts of environmental degradation, deforestation and natural resource management (NRM), based on participants' experiences and perspectives; (2) a theoretical overview of these three concepts and their interrelationships; and finally (3) an introduction to forest landscape restoration. In this unit, participants are expected to reflect on and discuss their understanding of environmental degradation, deforestation and NRM and learn about their causes, linkages and impacts within their natural and socio-economic settings. After completion of the second unit, participants begin to understand the direct links between environmental degradation, deforestation and the NRM strategies and practices to prevent and mitigate negative impacts. This results in initial motivation to protect their environment and thus forms the basis for behaviour change towards FMNR.

Figure 2 Learning unit 2: Environmental degradation, deforestation and natural resource management



Module 2.1: Linkage diagrams on environmental degradation, deforestation and natural resource management (participatory group reflection exercise)

Theoretical background

A linkage diagram is a qualitative and participatory method and tool often used in action research. It visualises factors and components of a given variable or research topic, as well as their interrelations. In this training, the linkage diagram is used to help participants reflect on their perceptions and understanding of the concepts of environmental degradation, deforestation and NRM, and to identify key corresponding aspects and drivers. This activity lays the foundation for understanding the FMNR approach.

Components

Linkage diagrams include aspects from various domains (e.g., social, economic, technical, environmental) and across different scales (e.g., individual, household, community). Furthermore, linkage diagrams aim to visualise and/or map the interconnections between specific aspects related to one or more topics under consideration. The interlinkages depicted in the diagram can be of different natures, such as causal, dependent or conflicting. Hence the linkage diagram is an analytical and participatory tool that allows participants to indicate which aspects are associated with environmental degradation, deforestation and NRM.

Systems approach

The linkage diagram method is grounded in a systems perspective that acknowledges the existence and interplay of different system components. This helps to shed light on root causes or problem drivers within the system that is being considered. With its participatory approach, the linkage diagram provides a tool that meets the needs of the workshop. By supporting participants in identifying aspects associated with environmental degradation, deforestation and NRM at the household and community level, the tool promotes critical analysis and a systemic perspective, which sets the foundation for behavioural change and provides entry points for FMNR. Only through understanding and addressing the system in which FMNR interventions take place can system change occur.

Potentials for the FMNR workshop

Whether the facilitator has worked with the workshop participants before or is new to the area, a good way to start is to find out from the community members involved what they know about environmental degradation and deforestation and what their main concerns are. The use of linkage diagrams is therefore suitable to serve this purpose as it:

- allows participants to explore issues that are of great concern to them, integrating and comparing multiple perspectives
- helps to identify key aspects and drivers of topics in question, such as environmental degradation, deforestation and NRM
- facilitates reflections on and conceptualisation of environmental degradation, deforestation and NRM
- enables entry points for sustainable NRM strategies and practices, including FMNR.

Drawing a linkage diagram with FMNR workshop participants

The implementation of this method in the fieldwork comprises two main parts: (1) drawing and discussion of the linkage diagram with a small group of participants (3 to 5 people), and (2) subsequent presentation and joint discussion of the diagrams of each group in plenary. This allows for further exchange and reflections among the participants on the different linkage diagrams resulting from various perspectives and experiences (Campbell, 2002).

General steps for drawing and discussing the diagram

The exercise of producing a linkage diagram consists of four general steps:

- Step 1: Selecting a focus
- Step 2: Choosing the context
- Step 3: Drawing the linkage diagrams
- Step 4: Identifying the key aspects and drivers.

For Step 1, two alternatives are outlined which differ between a broader focus and a single focus. This can be determined depending on the desired focus of the linkage diagram activity and the heterogeneity of the participants. These are referred to as Step 1(a) and Step 1(b) below. There are no such alternatives for the remaining steps, which are to be applied as per the described guidelines. In addition, it is advisable to work in the language that the participants know best and to translate the terms and concepts used in the exercise accordingly. Overall, the whole exercise should not take longer than 60 minutes.

Step 1(a): Selecting a broader focus

At the beginning of the activity, a decision has to be made about the focus for which the linkage diagram will be created. This option provides the opportunity to choose a broader focus that aims to address the three topics of the module simultaneously: environmental degradation, deforestation and NRM. The two concepts of environmental degradation and deforestation can be closely related. A joint reflection and discussion on both may provide participants with a holistic understanding of these two concepts, while highlighting their interlinkages. This approach would then lead to an understanding of NRM as a nexus of strategies and practices that help prevent and/or mitigate aspects associated with environmental degradation and deforestation. Furthermore, undertaking this broader focus allows group members to bring all the different knowledge, experiences and perspectives into the development of the linkage diagrams.

Step 1(b): Selecting a single focus

Another option for this first step is to choose a single focus. This means that each group should focus on only one of the concepts in this module: (1) environmental degradation, (2) deforestation or (3) NRM. This approach allows for specific aspects to be covered concerning the concept in question, thus avoiding unprecise or too general information that might emerge if a broader focus is set. This also enables group members to think more deeply and gain a better insight into the aspects related to the specific concept the group is asked to address.

Step 2: Choosing the context

A linkage diagram is always context-specific. As the aspects and drivers of environmental degradation, deforestation and NRM strategies vary across different places and communities, it is important to consider the local context for which the linkage diagram is to be drawn. Facilitators in particular need to be mindful of this, as they will be working with the same tool but in different contexts.

Step 3: Drawing the linkage diagrams

The process starts by writing the name of the three concepts (in the case of Step 1(a)) or one concept (in the case of Step 1(b)) in the middle of the flip chart. Be sure to distribute the names on the poster in such a way that there is enough space for the related aspects. The group then jointly reflects upon and discusses all the aspects associated with the concept(s) in question and records them on the poster. Connections between the different aspects are shown by lines or arrows. The group should take time to draw the diagram, as the result will form the basis for identifying key aspects and drivers of environmental degradation and deforestation, as well as NRM strategies and practices.

Step 4: Identifying the key aspects and drivers

After completing Step 3, the facilitator initiates a group discussion within the respective small groups. The discussion should focus on finalising the linkage diagram by identifying the most important aspects and drivers and how they are related (e.g., can you explain how this aspect is connected to environmental degradation and/or deforestation? Can you explain why this is an NRM strategy to counteract environmental degradation and/or deforestation?). The small groups then return to the plenary together and each group has the opportunity to briefly present and explain their flip chart to the rest of the participants. To stimulate a plenary discussion, at the end of each presentation, participants are invited to ask questions and/or give their opinions on the linkage diagram. This discussion is moderated by the facilitator.

Optional: It may be useful to make a recording of the drawing exercise to capture debates, decisions and ideas at this stage. Alternatively, the same could be documented in the form of written notes.

A facilitator explains the linkage diagram during FMNR training. © World Vision Ethiopia

What should be considered when selecting members for group work?

When forming a group where each member feels comfortable to actively engage and share their own opinions during the activity, it is of utmost importance to carefully consider social and power dynamics between workshop participants. Groups with pronounced social differences such as age, gender, educational level and social status may prevent individual group members from actively participating. Women in particular may find it difficult to express their own views in front of men. Therefore, it is recommended to form gender-separate groups for this exercise. Another option would be to select participants based on their common interest group (e.g., producer group, saving groups, community-leaders, teachers, etc.). As such participatory diagrams are usually more effective when conducted in homogenous groups, both suggested options would allow participants to feel comfortable in the group and be eager to actively engage in the exercise.

What should be considered when choosing a facilitator for group work?

In the case of gender-separate groups, facilitators should be of the same sex as the participants (female facilitators for female groups and male facilitators for male groups). In addition, to reduce potential biases that might arise from social obligations and hierarchies, it would be an advantage if the facilitators were neither part of the target community nor extension staff with whom participants regularly interact.

To what extent should the facilitator be involved during the drawing activity?

If possible, the decision to have less or more involvement of the group facilitator during the exercise should be agreed together with the participants, considering their abilities and willingness to work independently. Some participants would feel more comfortable creating the diagram on their own, whereas in other groups, members may need the facilitator's support. Participants may delegate the facilitator to draw and write. In this case, participants can focus on the exercise and literacy levels become less relevant. Before presenting the results of each linkage diagram in plenary, the group facilitator should ask the group if anyone feels ready to present it to the other participants. Not everyone finds it easy to speak in front of a public audience, so the group facilitator can take over the presentation if the group members are hesitant. The group facilitator would welcome any integrating contributions from group members during the presentation.

FMNR training participants during the linkage diagram session. © World Vision Ethiopia

What should be considered when choosing the format for the drawing activity?

Depending on the background of the participants (e.g., their literacy level, preferences and needs) and the learning objectives to be achieved, facilitators may choose between more or less structured formats. In a less structured format, participants proceed analogously to the steps described in the section above. They write down all aspects they associate with environmental degradation, deforestation and NRM. In a more structured format, facilitators pre-define subtopics (e.g., economic, social, technical) that can be presented at the beginning or during the drawing activity. Participants are then asked to focus on aspects from these subtopics.

Sources for additional information:

- Fischer, G., Wittich, S., & Fründt, S. (2019). Gender analysis in farming systems and action research; A training Manual. International Institute of Tropical Agriculture. https://cgspace.cgiar.org/handle/10568/100149
- Hall, R., Brent, Z., Franco, J., Isaacs, M., & Shergo, T. (n.d.); A Toolkit for Participatory Action Research. https://www.tni.org/files/publication-downloads/a_toolkit_for_participatory_action_research.pdf

Facilitation, steps and guidelines

Table 7. Module 2.1 overview

Overview	Linkage diagrams on environmental degradation, deforestation and natural resource management
Time	75 minutes
Learning objectives	The participants ➢ have reflected on and identified key aspects and drivers of environmental degradation in their context ➢ have reflected on and identified key aspects and drivers of deforestation in their household and community ➢ have reflected on and identified current NRM strategies and practices in their household and community
Topics	◊ Linkage diagram and environmental degradation, deforestation and NRM ◊ Linkage diagram as a participatory group reflection tool ◊ Interlinkages between environmental degradation, deforestation and NRM
Preparation	❋ Prepare the room for group work (5 to 6 tables with chairs, flip chart papers and markers of different colors) ❋ Prepare PowerPoint slide or poster with instructions for group work and for using linkage diagram ❋ Prepare a template/example of a linkage diagram (see Annex 1)
Materials	☼ Flip chart papers (one for a group of 4 to 6 participants) ☼ Marker pens (different colors) ☼ PowerPoint presentation or poster ☼ Template of a linkage diagram ☼ Handouts with instructions

Methods	✳ Presentation ✳ Group work ✳ Plenary discussion
Remarks	✓ The implementation of this module may require the involvement of more than one facilitator, especially to support the group work ✓ Facilitator(s) should encourage active participation of all workshop participants during the activity

Steps and guidelines

Step 1: To understand FMNR and the need for its intervention, it is important to first reflect on the local context and consider the issues of environmental degradation, deforestation and use of natural resources. Explain that this module introduces a participatory group reflection tool to help identify key aspects related to the concerned concepts: the linkage diagram.

Step 2: Introduce the structure of the module. In the first part, the group will be given a general understanding of linkage diagrams as a participatory tool; in the second part, participants will be divided into 5 to 6 groups to draw the linkage diagrams, as well as discuss and identify key aspects and drivers related to the three concepts of concern. Finally, explain that the exercise will be followed by a plenary discussion on the results of the group work, the experiences and lessons learnt from the exercise.

Step 3: Present the linkage diagram and familiarise the participants with its main features. You may utilise the background information given in the previous section and use a linkage diagram template for example and reference (see Annex 1). Answer the following questions for the participants:

- What is the scope of the linkage diagram for this workshop?
- What are the components of a linkage diagram?
- How is a linkage diagram developed?

You may also use the flip chart to explain the general instructions. Ask for questions and comments.

Step 4: After this presentation, divide participants into groups according to the recommendations provided in the 'Theoretical background' section. Assign each group a table for group work; each facilitator should join a group if needed. Distribute the handouts with the instructions and go through each step in the small groups.

Step 5: The groups embark on the drawing exercise. After about 20 minutes, request the groups to mark the key aspects and drivers of environmental degradation and deforestation that are specific to their context, as well as strategies and practices of NRM that can address such aspects. Finish the drawing exercise after approximately 30 minutes.

Step 6: After completing the exercise, request the group to hang their linkage diagrams on a designated wall in the room. Invite them to take a short walk to see what the others have produced. After a few minutes, ask them to return

to the plenary – with the chairs placed in a semicircle to be able to see the different posters.

Step 7: Start the plenary discussion. Ask one member of each group to briefly present the key aspects that emerged in their linkage diagram. During each presentation invite questions and comments from the other participants.

Step 8: When all the linkage diagrams have been shared and discussed, start a debrief about the tool. Ask participants about their experiences during the drawing activity. Regarding the process: What went well? What challenges did they experience? Regarding the tool: How did they like the tool? What did they like or dislike about it?

Step 9: Conclude the module by pointing out that the linkage diagram sets the foundation for the next modules of the workshop and therefore supports the identification of entry points for FMNR in the specific context. Appreciate and thank the participants for their active contribution and for sharing their insights before moving on to the following module.

Facilitator's notes:

- Participants may connect better with a presentation of a linkage diagram on paper rather than on a PowerPoint slide. Therefore, it is recommended to present an example of a linkage diagram on a poster (e.g., from a case study or a previous training) and put it on a large table. Invite participants to stand around the table while you explain the Steps 1 to 3.
- In Step 8, the debriefing discussion should reflect on the experience with the tool rather than the content of the exercise.
- As a facilitator, it is recommended to capture and document the linkage diagrams and presentations produced during the group work for knowledge management and future trainings.
- An example for step-by-step guidance can be found on page 50 in the International Institute of Tropical Agriculture's Gender analysis in farming systems and action research: A training manual.

Module 2.2: Basics of environmental degradation, deforestation and natural resource management

Theoretical background

Ecosystems and natural resources provide fundamental support to the life of humans and all living beings through the provision of water, air and land resources. Ecosystems such as forests provide multiple ecosystem services including soil formation, nutrient cycling, climate and water regulation, water purification, pollination, food, freshwater and fuelwood, nature-based recreation, and education. Healthy and functioning forest ecosystems protect water sources and reduce humans' risk of disasters, such as landslides and flooding. Globally, 1.6 billion people depend on forests for their livelihood (UNEP, n.d.). Thus, the sustainable management and equitable use of natural resources are fundamental for sustainable development.

Environmental degradation and deforestation

Environmental degradation encompasses the depletion of vital natural resources, including water, air, soil, plants, animals, and other elements of the environment, destruction of ecosystems and pollution. As a result of degradation, ecosystems are no longer able to sufficiently provide goods and services to people and the planet. More specifically, the long-term loss of soil organic carbon, the reduction or loss of biological productivity, ecological integrity or value to humans is what is defined as land degradation (IUCN, 2015). Globally, approximately 25% of the earth's total area has been degraded (GEF, n.d.), making land degradation one of the most pressing environmental problems and posing serious challenges to biodiversity conservation, sustainable development, and climate change mitigation and adaptation. When land degradation occurs in drylands this is known as desertification.

Land degradation stems from a variety of complex interrelated biophysical changes, which can be grouped into three major types related to (1) soil, (2) vegetation and forests, and (3) water resources, which can be subdivided according to a specific subset of degradation processes. These types encompass specific subsets of degradation processes, including soil erosion, biological, chemical and physical soil degradation, vegetation and forest degradation, deforestation, as well as water resource degradation (see Annex 2).

Land degradation is caused by direct and indirect human-induced processes, including anthropogenic climate change. Unsustainable land management, for instance in the agricultural sector (e.g., through conventional tillage, overgrazing), as well as land-use changes (through land clearing and conversion of forests and wetlands) are among the most critical human causes driving degradation (Olsson et al., 2019). These are exacerbated by climate change impacts. Furthermore, insecure land tenure and weak environmental policies and regulations for conserving natural resources further contribute to this negative trend in land conditions. Therefore, land degradation adversely affects multiple human aspects of life, with social, political, cultural and economic impacts, leading to profound implications for societal groups and livelihood systems based on natural resources (Olsson et al., 2019).

People, households and communities that directly depend on natural resources for their subsistence, income and food security (including women, youth, people living with disabilities and indigenous groups with limited adaptative capacities) are particularly vulnerable to environmental or land degradation. Land degradation reduces the productivity of land and increases the workload for land management, which in some regions affects women disproportionally. Furthermore, with deforestation resulting in reduced access to firewood, community members are forced to travel long distances, creating labor burden and increasing time spent collecting firewood in the long term. Likewise, land degradation and deforestation can have major impacts on the hydrological system, undermining water quality and quantity and resulting in serious consequences for people and their livelihoods. Examples of this include increased pollution and sedimentation in streams and rivers as well as drying up of water bodies and lowering of groundwater levels.

Environmental degradation can therefore create or exacerbate competition for scarce resources through multiple and intertwined threats, which in turn exacerbates food insecurity, poverty, conflict and migration among rural people and communities.

Natural resource management

For people and communities living in degraded areas – whose livelihoods, food security and income directly depend on natural resources – avoiding, reducing or reversing environmental degradation is of critical importance. The sustainable utilisation of natural resources (such as water, air, land, forests, fisheries, and wild flora and fauna) reduces and prevents further degradation and enhances ecosystems' services, which are indispensable for a better quality of human life. Sustainable NRM also simultaneously creates co-benefits such as adaptation and mitigation of climate change.

Sustainable NRM entails a comprehensive array of conservation and restoration/regeneration practices and approaches for landscape management. These include soil and water conservation infrastructure (e.g., terraces, trenches, check-dams, sand dams or weirs), enrichment planting as well as approaches such as sustainable land use management.

Sources for additional information:

- Intergovernmental Panel on Climate Change (IPCC). (2019). 'Land degradation'. https://www.ipcc.ch/site/assets/uploads/sites/4/2022/11/SRCCL_Chapter_4.pdf
- Muller, A., Lindell, C., de Villier, I., Garrett, J., Ondere, L.; Zoueini, R., Kelly, R., McKenzie, S., Banu Immanuel, S., Jabeen, S., & Yamada Morovic, Y. (2023). Regreening Communities Handbook. World Vision International. https://www.wvi.org/publications/field-guide/climate-change/project-model-handbook-regreening-communities
- World Vision and GIZ. (2021). Forestmaker – Training on FMNR. (Video, 14:34). https://youtu.be/K7aOkCs1PuE?feature=shared

Facilitation, steps and guidelines

Table 8. Module 2.2 overview

Overview	Basics of environmental degradation, deforestation and natural resource management
Time	30 minutes
Learning objectives	The participants ➢ know key aspects of the concepts of environmental degradation, deforestation and NRM ➢ are aware of the major links between the three concepts ➢ are aware of the main livelihoods implications of environmental degradation and deforestation
Topics	◊ Concepts of environmental degradation, deforestation and NRM ◊ Interrelations between environmental degradation, deforestation and NRM
Preparation	❋ Prepare PowerPoint slide or poster with basics of environmental degradation, deforestation and NRM ❋ Prepare flip chart papers, cards and marker pens
Materials	☼ Flip chart paper ☼ PowerPoint presentation or poster ☼ Cards ☼ Marker pens
Methods	✶ Presentation ✶ Plenary discussion

Steps and guidelines

Step 1: Begin this module by referring to the three concepts addressed in the previous activity, the linkage diagram. Explain that this module introduces the basics of environmental degradation, deforestation and NRM.

Step 2: Present the key aspects of environmental degradation, deforestation and NRM. You may utilise the background information provided in the previous section and write down key words and definitions on a flip chart support the explaination.

Step 3: Afterwards, refer to the linkage diagrams drawn by the participants to explain and emphasise how these have revealed the relationships and links between environmental degradation, deforestation and NRM. Ask participants if they have any questions.

Step 4: After this presentation, distribute blank cards to participants and ask the following question: 'What are the implications of environmental or land degradation and deforestation to your livelihoods?' Ask the participants to write down a few key words to answer this question on the given cards, based on their experience. This exercise should only take approximately 5 to 7 minutes. Once completed, each of the participants should pin their cards on the flip chart that you have prepared for this livelihoods question.

Step 5. Once all the cards are collected and pinned, in plenary you can read through and synthesise participants' contributions to highlight the direct and indirect impacts of environmental degradation and deforestation on peoples' livelihoods.

Step 6. Conclude by pointing out the need, importance and urgency of NRM interventions to address the negative impacts on livelihoods and mitigate, avoid and/or reverse land degradation.

Module 2.3: Introduction to community-based forest and landscape restoration (FLR)

Theoretical background

Community-based forest and landscape restoration (FLR) is the approach to restore degraded forests and landscapes and enhance human well-being that actively involves local communities in the planning, implementation, and management of restoration activities. Forest and landscape restoration practices have proven to have significant benefits in conserving biodiversity, supporting sustainable livelihoods and food security, and mitigating the impacts of climate change. These include sequestering carbon and reducing greenhouse gas emissions, improving landscape resilience and reducing disaster risks.

Benefits of community-based FLR

FLR not only restores trees but also improves the landscape by restoring ecosystem services such as soil fertility, water filtration, rich biodiversity and microclimate regulation, which ultimately reduces vulnerability to extreme climate events. Improving and protecting vegetation cover provides increased soil organic matter, nitrogen and soil stability, biodiversity conservation, as well as timber and non-timber forest product production.

Therefore community-based FLR has the potential to provide equally large climate change adaptation and mitigation benefits. Restoring forests and tree cover can contribute to local climate resilience as it may enhance rainfall through the process of evapotranspiration, reduce the impact of heat, provide habitat for biodiversity and create jobs for local people (Garrett, 2022). In addition, greater vegetation cover also sequesters and stores significant amounts of carbon from the atmosphere, thus counteracting climate change.

The benefits of environmental restoration thus go far beyond simply restoring damaged ecosystems; it can bring about a whole range of positive social, economic and environmental outcomes. More resilient and productive soils, vegetation, waterways, and coastal and marine areas directly benefit households and communities that rely on the environment for income, food, medicine and risk reduction.

Sources for additional information:

- International Union for Conservation of Nature (IUCN) (n.d.). 'Forest landscape restoration'. https://www.iucn.org/our-work/topic/forests/forest-landscape-restoration
- Mwangi, E.; & Evans, M. (2018). Communities restoring landscapes: Stories of resilience and success. Center for International Forestry Research. https://www.cifor.org/knowledge/publication/6980/

Facilitation, steps and guidelines

Table 9. Module 2.3 overview

Overview	Introduction to community-based forest landscape restoration (FLR)
Time	30 minutes
Learning objectives	The participants ➢ have a basic understanding of the concept of community-based forest and landscape restoration ➢ are aware of positive environmental implications of trees and other vegetation on microclimate, soil structure and quality, and water systems
Topics	◊ Concept of community-based landscape restoration ◊ Environmental benefits of vegetation cover for microclimates, soil structure and quality, and water management
Preparation	❋ Prepare PowerPoint slide or poster with key information on community-based FLR ❋ Prepare flip chart papers and marker pens
Materials	☼ PowerPoint presentation or poster ☼ Flip chart ☼ Marker pens
Methods	✶ Presentation ✶ Plenary discussion

Steps and guidelines

Step 1: Introduce participants to the last module of the this learning unit. Explain that they will learn about community-based FLR and its multiple benefits in combating environmental degradation and deforestation.

Step 2: Before the presentation, encourage participants to reflect on the meaning of FLR and its components, and ask them to share their opinions on and contributions to it. Facilitate the discussion and record participants' contributions on the flip chart.

Step 3: Conduct presentation on the basics of the community-based FLR approach. While presenting, refer to the contributions shared in the previous step. You can also use the theoretical background from the previous section.

Step 4: Next, broaden the discussion and ask participants in plenary to reflect on the benefits they can derive from community-based FLR interventions. Facilitate the discussion and record participants' contributions on the flip chart.

Step 5: Invite participants to ask questions or make comments regarding the topics covered in this module and/or learning unit.

Step 6: After addressing the questions/comments, thank the people for their active participation and close the last session of this learning unit.

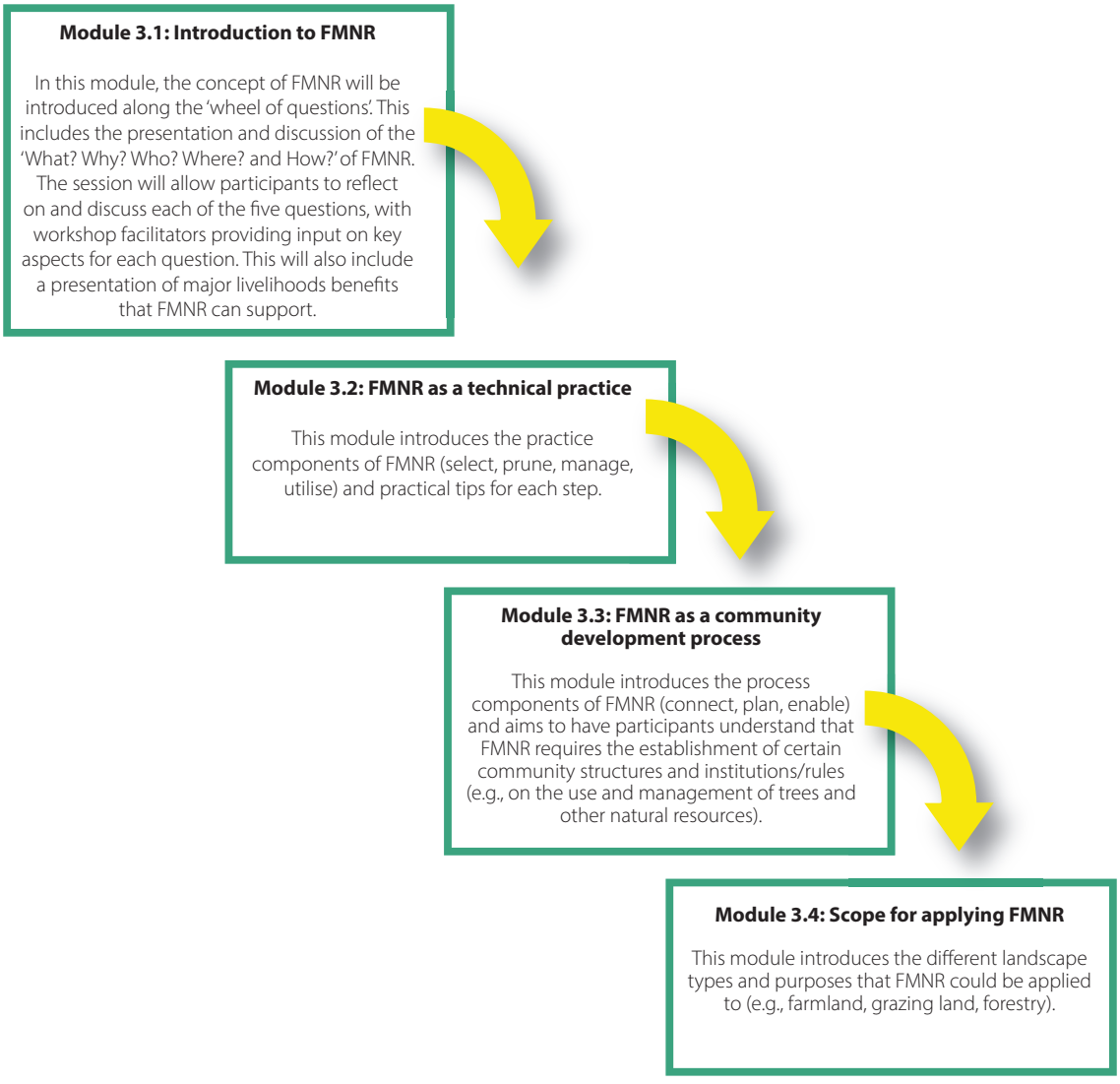
Facilitator's notes:

- As part of Step 4, it is advisable to ask the participants to reflect on the connections between the previous module (Module 2.2) and the current learning module.
- It is important to guarantee equitable involvement among all members, ensuring that each individual has an equal opportunity to contribute and participate.

Learning unit 3: Farmer Managed Natural Regeneration (FMNR)

The third learning unit represents the core of FMNR, its practices and scope. It comprises four modules that provide participants with a comprehensive understanding of the approach. In the first module, participants learn the concept of FMNR and its general components, followed by the explanation of FMNR as a technical practice in the second module. The third module aims to introduce FMNR process components and deepen FMNR as a community development process. Finally, the fourth module concludes by defining the scope for applying FMNR.

Figure 3 Learning unit 3: Farmer Managed Natural Regeneration (FMNR)



Module 3.1: Introduction to FMNR

Theoretical background

Module 3.1 introduces the concept of FMNR along a wheel of five questions. These are:

1. What is FMNR?

Farmer Managed Natural Regeneration (FMNR) is a low-cost and evidence-based approach to address deforestation and landscape degradation by restoring and improving agricultural, forested and pasture lands. FMNR is not tree planting. In contrast, it is based on the regrowth and management of existing trees and shrubs from tree stumps, sprouting root systems and existing seedlings. It can be applied wherever there are living tree stumps with the ability to resprout or develop from seeds that germinate.

FMNR is both a technical practice and community development approach to mobilise and empower local communities to naturally regenerate a diverse range of landscapes.

2. Who implements the FMNR approach?

Generally, the people who implement FMNR are the people themselves who use or depend on tree resources. This includes farmers, herders, community members, and particularly women and children who harvest wood and non-timber forest products. As the process of FMNR is very simple, low-cost and high impact, any group or community that is experiencing problems such as insufficient wood supplies, soil erosion, loss of tree cover, poor crop yields or low income for natural resource-based livelihoods can be trained to practice FMNR.

Members of the community who are already interested and active in conserving and sustainably managing trees may be the best initial partners, with the perspective to influence the whole community over time. Potential groups who may be interested in being involved in a working group focused on this approach include, womens' and farmers' cooperatives and collectives, youth employment and action clubs, saving and loan groups, individual farmers, community-based organisations and faith-based groups.

3. When should FMNR be implemented?

FMNR is possible in a wide range of environments, from arid to humid tropics. Because FMNR is inexpensive and contributes to numerous areas of value, a rule of thumb is to consider using it in any situation where the loss of tree cover is negatively affecting human well-being and where living tree stumps or naturally-sown seeds exist in the landscape.

The following are some indicators that may be useful in understanding when FMNR should be considered:

- signs of decreasing income for people dependent on natural resources
- lower crop yields due to soil erosion, drought, flood or wind damage, poor soil fertility

Field practical session during FMNR training. © World Vision Ethiopia

- loss of tree cover negatively impacting crop yields and livestock productivity, and increasing the severity of winds, drought, floods, higher temperatures and other hazards
- loss of critical levels of environmental biodiversity and a desire from the community to restore this
- shortage of firewood and timber for construction
- productive land lost through erosion and deteriorating climatic conditions
- fluctuations between excessive and insufficient rain
- community members are forced to migrate for work due to decrease in crop yields and farm profits.

4. How should FMNR be implemented?

The FMNR process includes a technical practice and a community development process. The technical practice is very simple and it is used to grow and manage the existing trees and shrubs and regenerate the landscape. It is based on four practice components: select, prune, manage and utilise. These components are discussed in more detail in Module 3.2 which follows.

As a community development process, successful implementation of FMNR requires the active participation and engagement of community members. Three components have been identified to steer the FMNR process: connect, plan and enable. These components are explained in Module 3.3.

In addition, implementing FMNR with other complementary NRM approaches and practices can help create the enabling conditions required to accelerate the natural regeneration of trees on landscapes. Integration of complementary NRM practices can entail supplementary tree planting or reseeding on denuded or bare areas that lack sufficient regenerants such as living rootstocks and/or wild seeds. This is also known as enrichment planting. Another example is the installation of small-scale physical structures for rainwater harvesting and soil and water conservation infrastructure (e.g., terraces, trenches, check-dams, sand dams or weirs).

5. Why is FMNR important for livelihood development?

FMNR outcomes do not only benefit the environment but also the communities who rely on it for survival. FMNR helps create viable, sustainable livelihoods that provide for future generations. It helps to restore the productivity of landscapes and provides opportunities for diverse livelihood options. It contributes to production of sustainable tree products that can be used to generate income, such as firewood, fruits, herbs, fodder or timber. FMNR has a significant and positive impact on food security by improving the productivity of land that can be used for growing crops and feeding livestock. Furthermore, complementary tree-based value chain development activities, such as beekeeping, can improve FMNR adoption and sustainability by increasing their utility and economic value to households and communities. By improving resilience to shocks such as drought, it helps households maintain an income source during difficult periods (see Annex 4).

Relationship between FMNR and FLR

FLR is a broader, landscape-scale practice that FMNR can contribute to. FLR includes a range of different practices, including tree planting, agroforestry, natural regeneration, assisted regeneration and FMNR. FMNR has enormous potential to contribute to FLR, particularly when practiced at a landscape scale by many land users and on communal land, such as hill slopes, forest buffer zones or along riparian areas.

Sources for additional information:

- World Vision Australia. (2018). FMNR Manual, Chapter I: Introduction to Farmer Managed Natural Regeneration. https://fmnrhub.com.au/wp-content/uploads/2019/02/FMNR-Field-Manual-Chapter-1.pdf
- World Vision Australia. (2019). FMNR Evidence of Impact. https://www.worldvision.com.au/docs/default-source/meta-evidence-briefs/evidence-of-impact-farmer-managed-natural-regeneration.pdf
- World Vision Australia. (n.d.). Fact Sheet: How to do FMNR. http://fmnrhub.com.au/wp-content/uploads/2014/04/FMNR-Quick-Guide.pdf
- World Vision and GIZ. (2021). Forestmaker – Training on FMNR (Video, 06:44). https://youtu.be/K7aOkCs1PuE?feature=shared
- World Vision West Africa Regional Office. (n.d.). Farmer Managed Natural Regeneration (FMNR). http://fmnrhub.com.au/wp-content/uploads/2014/04/FMNR-Poster-English.pdf

Facilitation, steps and guidelines

Table 10. Module 3.1 overview

Overview	Introduction to FMNR
Time	60 minutes
Learning objectives	The participants ➢ have understood that FMNR focuses on the rehabilitation of existing vegetation ➢ have understood the difference and relationship between FMNR and tree planting ➢ are aware that FMNR entails the technical practice and community development process ➢ are aware of the environmental and potential livelihoods benefits that FMNR supports ➢ know that FMNR is a continuous action that requires the support of the entire community ➢ have understood that FMNR needs to be integrated with other livelihood actions and NRM practices
Topics	◊ FMNR concept ◊ Livelihoods benefits from FMNR
Preparation	❋ Prepare two or three posters with the heading 'FMNR' (otherwise empty) and hang them on flip chart stands ❋ Prepare the poster template for the 'wheel of questions' exercise (see Annex 5) ❋ Prepare questions and answers for the 'wheel of questions' exercise on cards (see background information and Annex 5)
Materials	☼ Flip chart ☼ Marker pens ☼ Posters ☼ Cards ☼ Video material (optional)
Methods	✶ Presentation ✶ Participatory design ('wheel of questions') ✶ Plenary discussion

Steps and guidelines

Step 1: Explain that this module introduces the concept of FMNR and its general components.

Step 2: Invite participants to stand up and gather in front of the two or three posters with the heading 'FMNR' (otherwise empty) on the flip chart stands. Request them to reflect and write on the empty posters what they associate with FMNR or what they already know so far, in case they have had had previous exposure. Encourage them to note whatever comes to their mind in connection with FMNR. As soon as they have completed the activity, ask them to return to their seats, and share with them all (by reading out) what has been written on the posters. Thank the participants and explain that their reflections and inputs are preparatory and relevant for the next exercise.

Step 3: Introduce participants to the 'wheel of questions' exercise. You may want to put the poster with the template on the floor in the middle of the semi-circle of chairs or hang it on a flip chart stand, for all the participants to be visible.

Step 4: Explain that you will introduce and discuss the main components and aspects of FMNR along this wheel of questions (use the background information and Annex 5).

Step 5: Start with the 'what' question. Place your card with the 'what' question in the respective field of the template and read it out. Ask the participants to suggest answers and deposit the 'what' answer cards you have prepared. Read out each answer card related to the 'what' of FMNR and place them, one by one, in the 'what' field. Continue with the same procedure for 'who', 'when', 'how and 'why'.

Step 6: Invite comments and questions before you close the module.

Facilitator's notes:

- The introductory activity in Step 2 is meant to encourage participants to reflect on and evaluate how their current knowledge relates to FMNR. When (after completion) the workshop facilitators read out participants' notes on the posters to the whole group, they should not provide comments on them.
- At the beginning of the exercise, the template for the 'wheel of questions' is empty. The cards with questions and answers are added step by step after having been introduced and discussed.
- If more than one person is facilitating the workshop, different facilitators can present the different questions.
- An example for step-by-step guidance can be found on page 62 in the International Institute of Tropical Agriculture's Gender analysis in farming systems and action research: A training manual.

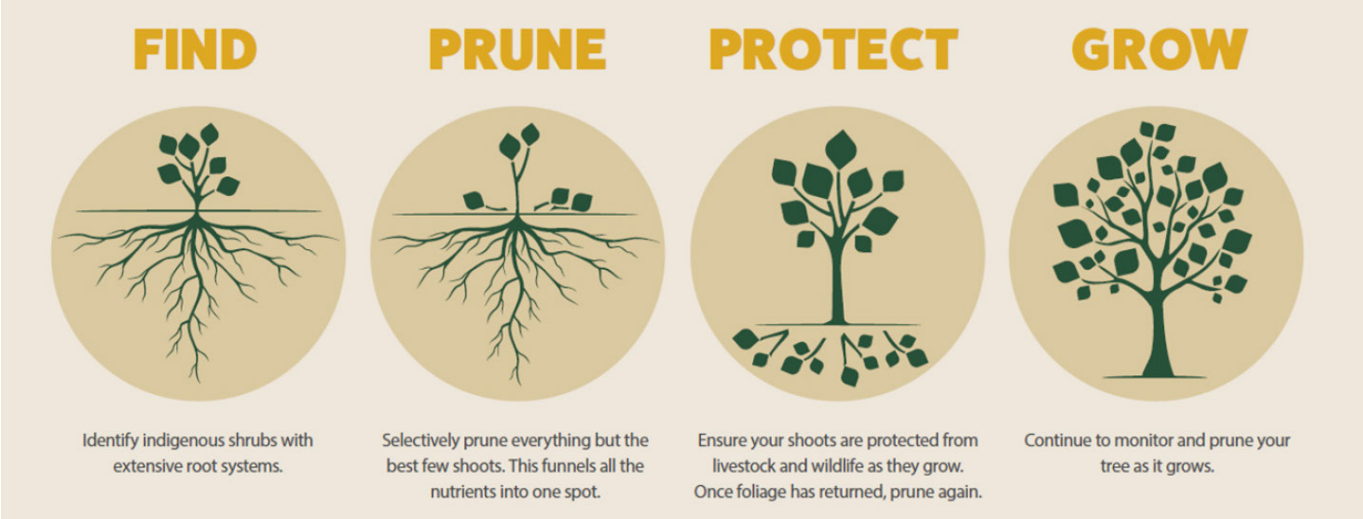
Module 3.2: FMNR as a technical practice

Theoretical background

FMNR as a technical practice is extremely versatile. It can vary depending on the context, the tree species chosen, the number of trees per hectare, the number of stems selected per stump and the extent of stem pruning. In addition, FMNR practice depends on what the community's priorities and objectives are in implementing FMNR.

In general, FMNR involves four main practice components: (1) find and select, (2) prune, (3) protect and manage, and (4) grow and utilise. These basic steps of FMNR, or practices, can be adapted through experimentation to identify which practices best meet the needs of the people using the land and managing the trees in their contexts.

Figure 4 The FMNR technical practice components. Source: World Vision International, 2023.



1. Find and select

In this first step, FMNR practitioners determine the number of and select indigenous species of trees and shrubs to be regenerated and/or actively managed in the landscape. The selection of tree species and shrubs is a critical part of the FMNR process as it strongly influences the outcomes of FMNR activities. FMNR practitioners are responsible for selecting the tree species that are most useful and valuable to them and their community (e.g., intercropping with food, timber and firewood, fodder, bee-keeping). Generally, FMNR works with indigenous species that are naturally present in the targeted area, contributing to the enhancement of biodiversity and the conservation of local environmental ecology while meeting community needs.

The selection of trees and shrubs is done in two steps: (1) land users survey the land for sprouting stumps and/or seedlings and identify which species of trees and shrubs are present; (2) tree and plant species are selected based on community preferences and environmental and community needs.

2. Prune

Once the preferred species and stumps, trees or seedlings have been selected for regeneration, it is time for pruning. FMNR practitioners selectively remove the stems and side branches of regenerating tree stumps and shrubs. This helps to maximise their growth and regeneration by directing resources and nutrients to a few selected stems and side branches.

The pruning technique includes three fundamental rules to bear in mind to prevent diseases and damage to the regenerating trees. These are: (1) use sharp tools, (2) cut upwards and not downwards, wherever possible, and (3) do not prune stems too high.

3. Protect and manage

After selection and pruning, it is important to manage and protect the stumps and shrubs as they are growing. FMNR practitioners manage the pruning of stumps and shrubs by periodically returning to selectively prune new stems and side branches. In addition, the remaining stumps and shrubs can be protected from potential threats such as livestock, fire, people and competing vegetation or weeds through improved grazeland and livestock management practices, social fencing, live fences and/or fire breaks.

4. Grow and utilise

Trees continue to be monitored and pruned as they grow. Also, FMNR trees can be used for a variety of purposes, depending on community needs. Practitioners use the stems and side branches harvested through the pruning system for planned purposes such as firewood, fodder or mulch. The shoots that regenerate following the harvest of stems will be actively managed to accelerate their regeneration. As the trees grow, practitioners may also benefit from wild foods, traditional medicines, dyes, gums and other non-timber forest products, depending on the species. In some circumstances, the entire tree may be felled and used by the FMNR practitioners.

Field practical session during FMNR training. © World Vision Ethiopia

Sources for additional information:

- World Vision Australia. (2018). FMNR Manual, Chapter 4: How to practice FMNR. https://fmnrhub.com.au/wp-content/uploads/2019/03/FMNR-Field-Manual-Chapter-4_FA.pdf
- World Vision and GIZ. (2021). Forestmaker – Training on FMNR. (Video, 08:00). https://youtu.be/K7aOkCs1PuE?feature=shared
- World Vision West Africa Regional Office. (n.d.). Farmer Managed Natural Regeneration (FMNR). http://fmnrhub.com.au/wp-content/uploads/2014/04/FMNR-Poster-English.pdf

Facilitation, steps and guidelines

Table 11. Module 3.2 overview

Overview	FMNR as a technical practice
Time	45 minutes
Learning objectives	The participants ➢ know the four practice components of FMNR ➢ have a good theoretical understanding of the practical execution of each practice
Topics	◊ Practical components of FMNR
Preparation	❋ Prepare a PowerPoint slide or flip chart with the four FMNR practice components ❋ Prepare a PowerPoint slide or flip chart to explain and illustrate each of the FMNR practice components
Materials	☼ Flip charts ☼ Pens ☼ Cards ☼ Video material (optional) ☼ PowerPoint presentation (optional)
Methods	✶ Presentation ✶ Plenary discussion
Remarks	✓ If feasible, you can complement this session with a practical on-farm demonstration of these FMNR techniques

Steps and guidelines

Step 1: The previous module has provided an overview of the concept of FMNR. Explain that this module is a theoretical session aimed at illustrating how to practice FMNR through four main components.

Step 2: Introduce the four FMNR practice components (find, prune, protect, grow). You may use a PowerPoint presentation or a flip chart to present the four practices.

Step 3: Explain the practices one by one, using the background information above as well as pictures and figures to help participants better understand the technical approach. For each step include practical tips alongside the theory.

Step 4: Finally, invite participants in the plenary to ask questions or comment on the four FMNR practices, before wrapping up the module and moving to the next one.

Facilitator's notes:

In addition to presenting the practice components in the PowerPoint slides or flip chart, you may consider showing the session on practicing the FMNR method from the video 'Forestmaker – Training on FMNR', available online.

Module 3.3: FMNR as a community development process

Theoretical background

In addition to the four practice components described in the previous module, FMNR is also a community empowerment process that re-greens both community mindsets and people's relationships to nature and their landscape. For FMNR to become a sustainable practice embedded in everyday life, it requires a community development process. This involves three main components: (1) connect, (2) plan and (3) enable.

Figure 5 FMNR core components, including four practices (top half-circle) and three process components (bottom half-circle). Source: World Vision International, 2020.

1. Connect

At first, community members need to come together to explore what their environment was like in the past, what it is like today and what it is likely to be in the future. A common understanding of the environment, as well as traditions, traditional roles and dynamics of people in the community, is critical to fostering engagement and identifying what is needed to improve life in the community. Therefore, community members should (in a participatory manner) analyse, discuss and connect the root causes of deforestation and landscape degradation with corresponding consequences for their community. Once these connections have been made, FMNR is introduced as a potential solution.

2. Plan

After community members decide that FMNR is the appropriate method to address their environmental concerns, an action plan can be developed. Community members engage in a participatory visioning process to identify common goals and agree on tangible actions to drive and enable the scale-up of FMNR on communal and privately owned/managed land. These plans can vary in formality and may be developed and refined over the years.

3. Enable

Capacity-building activities enable community members to acquire technical knowledge and skills to adopt and promote FMNR practices in landscapes. This also includes identifying, training and mentoring FMNR Champions who actively work to enhance the spread and adoption of FMNR in the communities. FMNR Champions are individuals who have successfully applied and practiced FMNR themselves and teach others through their knowledge and experience with FMNR. In this context, exchange visits among FMNR practitioners are a powerful method in helping to demonstrate the benefits and effectiveness of FMNR.

In addition, sustainable dissemination of FMNR requires the establishment of certain community structures and institutions. If these already exist, their strengthening should be encouraged through training, mentorship and networking. These structures can include NRM committees, task groups, associations and similar organisational structures, based on the culture and needs of the community. Other important activities include the development and implementation of bylaws and other agreements on sustainable land and NRM, development of land use plans, and an appropriate and sustainable way of enforcing regulations (such as fines, community service or other approaches agreed on by the community).

Cross-cutting component: Mindset transformation

In addition to the community development components, central to FMNR is the mindset transformation that occurs as individuals and communities meaningfully engage with the FMNR process and adopt the practice. Through this process of mindset transformation, individuals and communities experience a positive shift in their attitudes and agency toward addressing the causes and consequences of environmental degradation. The result is a transformation from hopelessness and apathy to optimism and empowerment for a more prosperous and sustainable future.

Sources for additional information:

- World Vision Australia. (2018). FMNR Manual, Chapter 5: Community engagement to create sustainable FMNR practice. https://fmnrhub.com.au/wp-content/uploads/2019/03/FMNR-Field-Manual-Chapter-5_FA.pdf
- World Vision International. (2020). FMNR – Definition and key messages.

Facilitation, steps and guidelines

Table 12. Module 3.3 overview

Overview	FMNR as a community development process
Time	30 minutes
Learning objectives	The participants ➢ know the main process components of FMNR ➢ are aware of key structures and institutions needed to establish FMNR within the community (e.g., NRM committees, by-laws, land use plans, etc.)
Topics	◊ Community development process components of FMNR ◊ Structure and institutions for community engagement in FMNR
Preparation	❋ Prepare a PowerPoint slide or flip chart with the three FMNR process components ❋ Prepare a PowerPoint slide or flip chart to explain each FMNR process components
Materials	☼ Flip charts ☼ Marker pens ☼ Video material (optional) ☼ PowerPoint presentation (optional)
Methods	✶ Presentation ✶ Plenary discussion

Steps and guidelines

Step 1: Explain that the purpose of this module is to demonstrate how the FMNR approach, to be sustainable, requires a community development process that can be grouped into three main components.

Step 2: Introduce the three FMNR process components (connect, plan, enable). You may use a PowerPoint presentation or a flip chart to present them.

Step 3: Explain the components one by one, using the background information above as well as related pictures and figures, if available. For each step provide practical tips in addition to theory.

Step 4: In the plenary, invite participants to ask questions or make comments about the three FMNR process components, before closing the session and moving on to the last module of this learning unit.

Module 3.4: Scope for applying FMNR

Theoretical background

FMNR can be applied in different landscapes and land use systems, such as grazing land, cropland, forestland, catchment/watershed, communal sloping or degraded land.

FMNR in grazing land:

Scattered trees characterise this landscape, which provides several benefits such as fodder and shade for animals during dry seasons, while also enhancing biodiversity. The adoption of FMNR increases grass production for livestock, which is the main priority of this land use system. Therefore, tree density is often managed to avoid negative impacts on the grass and shrubs beneath which serves as important source of fodder for livestock.

FMNR in cropland:

Crop yields can be doubled or tripled when trees are grown together with other crops. However, this is only possible if trees with the appropriate characteristics, such as nitrogen-fixing trees, are selected. Through FMNR, farmers can help control how much shading of crops occurs through appropriately applying the pruning practice and managing the number of trees regenerated.

FMNR in forestland:

Forests that have been degraded due to clearing or harvesting may have low biodiversity or be scrubby, resulting in poor forestecosystems. The use of FMNR practices can successfully regenerate degraded forests by restoring a biodiverse and natural forest. In addition, forests that provide sustainable benefits, such as the provision of herbs, fruits and firewood, are more likely to be supported by the surrounding community, making their conservation easier.

FMNR for water management:

Increasing the number of trees in critical locations such as on hillslopes and upper catchment areas can help slow down water runoff, allowing more time for water to infiltrate and recharge groundwater reserves. FMNR can thus help to address issues related to soil erosion, land instability, salinity and depleted groundwater in catchments or watersheds.

FMNR in communal sloping or degraded land:

In many contexts, non-agricultural land situated on slopes is communal as opposed to privately managed land. Implementing FMNR in this type of landscape thus requires strong community engagement and group work. If communities do not have exclusive or predominant access rights to the land, local authorities should be involved to ensure communities' legal user rights. FMNR on communal land restores or enhances numerous ecosystem services, such as provision of herbs, wild food, firewood and non-timber forest products. It also improves crop pollination, crop protection and soil fertility, as well as water, erosion and climate regulation.

As indicated above, the implementation of FMNR practices is applicable to different landscape types and can serve a wide range of purposes. Increasing tree density and biomass has positive impacts on soil fertility, water availability, biodiversity and other ecosystem functions performed by a healthy environment.

Depending on practitioners' objectives and the species being regenerated, the FMNR trees can be managed for a wide range of purposes, such as:

- intercropping with food and cash crops
- boundaries/livie fences
- timber and firewood
- bee-keeping, fruits and non-timber forest products
- fodder
- forest restoration and biodiversity conservation
- land stabilisation/erosion control
- pasture land/communal land
- water conservation.

Site survey during FMNR training practical session. © World Vision Ethiopia

Sources for additional information:

- World Vision Australia. (2018). FMNR Manual, Chapter 4: How to practice FMNR. https://fmnrhub.com.au/wp-content/uploads/2019/03/FMNR-Field-Manual-Chapter-4_FA.pdf
- World Vision and GIZ. (2021). Forestmaker – Training on FMNR. (Video, 09:46). https://youtu.be/K7aOkCs1PuE?feature=shared

Facilitation, steps and guidelines

Table 13. Module 3.4 overview

Overview	Scope for applying FMNR
Time	30 minutes
Learning objectives	The participants ➢ know the different landscape types that FMNR can be applied on ➢ are aware of the different purposes FMNR can be applied for
Topics	◊ FMNR application in different landscape types ◊ FMNR purposes
Preparation	❋ Prepare a PowerPoint slide or flip chart with different landscape types ❋ Prepare a PowerPoint slide or flip chart to explain different FMNR purposes
Materials	☼ Flip charts and pens ☼ Video material (optional) ☼ PowerPoint presentation (optional)
Methods	✶ Presentation ✶ Plenary discussion

Steps and guidelines

Step 1: Introduce the participants to the last module of this learning unit, which precedes the workshop closing. Explain that in this module participants will learn about the different landscape types and purposes of FMNR application.

Step 2: Outline the different landscapes and land use systems that have been described in the technical background section. You may use a PowerPoint presentation or a flip chart to explain them. For a more interactive session, refer to the suggestion under 'Facilitator's notes'.

Step 3: Then introduce and go through the different purposes that the use of FMNR can serve.

Step 4: After that, invite participants to ask questions and/or make comments on the topics presented in this module.

Step 5: Having addressed participants' questions and/or comments, thank them for their active participation and close this last session of this FMNR learning unit.

Facilitator's notes:

To make the module more interactive for the participants, you may first ask them for their opinion/input regarding the types of landscapes where FMNR could be applied before showing your poster or slide. The same approach can be used before you explain the purposes.

Learning unit 4: Workshop closing

This is the last unit of this workshop manual. It wraps up the content of the training and provides space for addressing any open questions. Participants review their learning objectives and conduct a self-assessment.

Figure 6 Learning unit 4: Workshop closing

Module 4.1: Wrap-up and post-workshop evaluation

The module contains a wrap-up of the workshop through a brief summary on the main modules and aspects. In addition, participants will conduct a self-assessed post-workshop evaluation based on an adjusted evaluation form (with most questions remaining identical to those of the pre-workshop evaluation).

Module 4.1: Wrap-up and post-workshop evaluation

Table 14. Module 4.1 overview

Overview	Wrap-up and post-workshop evaluation
Time	45 minutes
Learning objectives	The participants ➢ are able to clarify remaining questions on the topics and concepts addressed in this workshop ➢ have reflected on their learnings and filled out the post-workshop evaluation form
Topics	◊ Brief summary of the main modules and aspects ◊ Clarification of open questions ◊ Reflection on learning objectives ◊ Self-assessment ◊ Evaluation
Preparation	❋ Display all posters and materials used during the workshop on walls or flip chart stands ❋ Hang the poster with the training's learning objectives on the wall or flip chart stand ❋ Print a copy of the post-workshop evaluation questionnaire for each participant (Appendix B) ❋ Prepare certificates for the participants (optional)
Materials	☼ Flip charts ☼ Post-workshop evaluation questionnaires ☼ Pens ☼ Certificates (optional)
Methods	✳ Presentation ✳ Self-assessment

Facilitation, steps and guidelines

Step 1: Welcome the participants to the final module. Introduce them to the content of this module: a recap of the main modules and aspects, followed by clarification of open questions, a reflection on learning objectives and a self-assessed written post-workshop evaluation.

Step 2: Give a short summary of the main modules of the training. Read out the most relevant topics and aspects presented on the flip charts of the previous modules.

Step 3: Ask the participants whether there are any questions or comments. Clarify any lingering questions about other aspects of the training.

Step 4: Draw attention to the learning objectives of the training as shown on the poster. Read out the objectives to remind the participants.

Step 5: Invite all participants to complete the post-workshop evaluation (Appendix B). Distribute the forms and give enough time for this step (approximately 30 minutes).

Step 6: After collecting the questionnaires, ask the participants to share feedback about the training verbally. Take note of this feedback for sharing and consideration in future trainings. Thank the participants for their feedback and express appreciation.

Step 7: If you have prepared certificates, present them. Congratulate each participant for attending this FMNR workshop. If desired, take a photo of the whole group.

Step 8: Before closing, ask the participants to take part in the last exercise. The exercise will only take one minute. Invite the participants to line up in a circle. When the circle is formed, ask them to turn to the right. Everyone puts their hand on the right shoulder of the person in front of them. Everyone pats the shoulder of the person in front and say, 'You have done a good job'.

Facilitator's notes:

- Do not react to the participants' feedback (e.g., by explaining why you did certain things or by defending yourself).
- You should contextualise the templates included in Appendix B.
- It is recommended to go through the questionnaire with the participants before they begin filling it out, to ensure that everyone has understood the task.

REFERENCE

Campbell, J. (2002). 'A Critical Appraisal of Participatory Methods in Development Research'. International Journal of Social Research Methodology, 5(1), 19–29. https://www.researchgate.net/publication/248988611.

Center for International Forestry Research. (2017). 'Smallholders and forest landscape restoration in upland northern Thailand'. International Forestry Review, Vol.19(S4), 102–119.

Fedele, G., Donatti, C., Bornacelly, I., & Hole, D.G. (2021). 'Nature dependent people: Mapping human direct use of nature for basic needs across the tropics'. Global Environmental Change, 71, 1–9. https://www.sciencedirect.com/science/article/pii/S0959378021001473

Fischer, G., Wittich, S., & Fründt, S. (2019). Gender analysis in farming systems and action research: A training Manual. International Institute of Tropical Agriculture. https://cgspace.cgiar.org/handle/10568/100149

Food Agriculture Organization (FAO). (2000). On Definitions of Forest and Forest Change. Forest Resources Assessment Programme. https://www.fao.org/3/ad665e/ad665e00.htm#TopOfPage

Garrett, L., Lévite, H., Besacier, C., Alekseeva, N., & Duchelle, M. (2022). The key role of forest and landscape restoration in climate action. FAO. https://doi.org/10.4060/cc2510en

The Global Environmental Facility (GEF). (n.d.). 'Land Degradation'. https://www.thegef.org/what-we-do/topics/land-degradation.

Hall, R., Brent, Z., Franco, J., Isaacs, M., & Shergo, T. (n.d.): A Toolkit for Participatory Action Research. https://www.tni.org/files/publication-downloads/a_toolkit_for_participatory_action_research.pdf

Intergovernmental Panel on Climate Change (IPCC). (2018). Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. 616. https://www.ipcc.ch/sr15/

IPCC. (2022). 'Land Degradation'. Climate Change and Land: IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems. 345–436. https://doi.org/10.1017/9781009157988.006.

International Union for Conservation of Nature (IUCN). (2015). Land Degradation and Climate Change. The multiple benefits of sustainable land management in the drylands. Issues Brief. https://www.iucn.org/sites/default/files/2022-07/land_degradation_issues_brief_cop21_031215.pdf.

IUCN. (n.d.). 'Forest Landscape Restoration'. https://www.iucn.org/our-work/topic/forests/forest-landscape-restoration.

Muller, A., Lindell, C., de Villier, I., Garrett, J., Ondere, L.., Zoueini, R., Kelly, R., McKenzie, S., Banu Immanuel, S., Jabeen, S., & Yamada Morovic, Y. (2023). Regreening Communities Handbook. World Vision International. https://www.wvi.org/publications/field-guide/climate-change/project-model-handbook-regreening-communities.

United Nations Convention to Combat Desertification (UNCCD). (2021). Desertification and land degradation and their impact on natural ecosystems and food security. https://unfccc.int/documents/278550

United Nations Environment Programme (UNEP). (n.d.). 'About forests'. https://www.unep.org/explore-topics/forests/about-forests

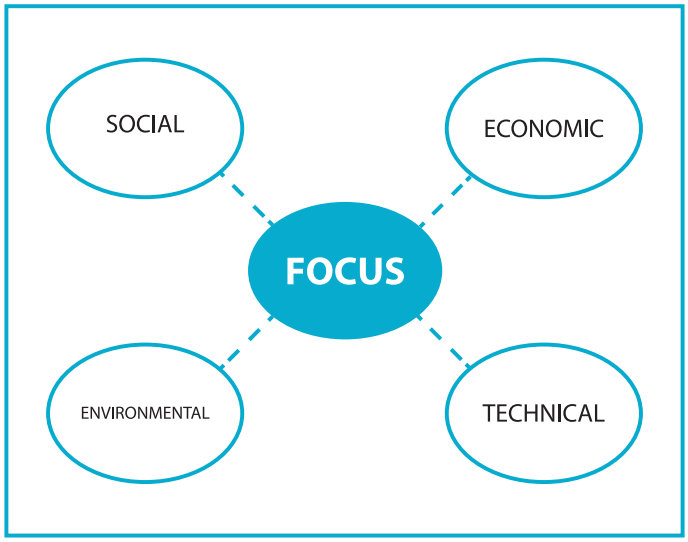
World Vision Australia. (2018). FMNR Manual. https://fmnrhub.com.au/wp-content/uploads/2019/03/FMNR-Field-Manual_DIGITAL_FA.pdf

World Vision International. (2020). FMNR Definition and key messages.

World Vision International. (2023). Regreening Communities Project Model. https://www.wvi.org/publications/report/climate-change/regreening-communities-project-model

ANNEXES

Annex 1. Format for drawing linkage diagrams



Source: Adopted from Fischer at al., 2019.

Annex 2. Land degradation types

Land degradation type	Definition
Soil erosion	The degradation of land that could occur through water and wind erosion. It may involve biological, chemical and physical degradation of soil
Biological degradation of soil	The impairment that leads to a decline or elimination of the humus content (biomass carbon) of soil through mineralisation and a decline in land biodiversity
Chemical degradation (nutrient depletion) of soil	Occurs when different soil nutrients are subject to be lost through erosion in runoff and eroded sediments
Physical degradation of soil	Occurs due to the sealing, compaction, debility in aeration and decline of soil permeability
Vegetation degradation	Involves a combination of processes that may be natural, notably climate change, which may lead to a loss of certain species and habitats, reduced biomass due to reduced moisture availability or encroachment by invasive species
Deforestation	The conversion of forested areas to non-forest land use such as arable land, urban use, logged area or wasteland and can result in land degradation. According to the United Nations Food and Agriculture Organization (FAO), deforestation is the conversion of forest to another land use or the long-term reduction of tree canopy cover below the 10% threshold.
Forest degradation	A process leading to a temporary or permanent deterioration in the density or structure of vegetation cover or its species composition. It is a change in forest attributes that leads to a lower productive capacity caused by an increase in disturbances.
Water resource degradation	Various processes of water resource degradation include changes in water quantity, quality and alterations in the hydrological regime. It is a result of degradation of surface and ground water resources and change in hydrological regime, degradation of water resources quality and storage capacity and water pollution.

Source: Based on FAO, 2000, and UNCCD, 2021.

Annex 3. Guiding principles of forest and landscape restoration

Guiding principles	Definition
Focus on landscapes	FLR takes place within and across entire landscapes, not individual sites, representing mosaics of interacting land uses and management practices under various tenure and governance systems. It is at this scale that ecological, social and economic priorities can be balanced.
Maintain and enhance natural ecosystems within landscapes	FLR does not lead to the conversion or destruction of natural forests or other ecosystems. It enhances the conservation, recovery, and sustainable management of forests and other ecosystems.
Engage stakeholders and support participatory governance	FLR actively engages stakeholders at different scales, including vulnerable groups, in planning and decision-making regarding land use, restoration goals and strategies, implementation methods, benefit sharing, and monitoring and review processes.
Tailor to the local context using a variety of approaches	FLR uses a variety of approaches that are adapted to the local social, cultural, economic and ecological values, needs, and landscape history. It draws on the latest science and best practices as well as traditional and indigenous knowledge, and applies that information in the context of local capacities and existing or new governance structures.
Restore multiple functions for multiple benefits	FLR interventions aim to restore multiple ecological, social and economic functions across a landscape and generate a range of ecosystem goods and services that benefit multiple stakeholder groups.
Manage adaptively for long-term resilience	FLR seeks to enhance the resilience of the landscape and its stakeholders over the medium and long-term. Restoration approaches should enhance species and genetic diversity and be adjusted over time to reflect changes in climate and other environmental conditions, knowledge, capacities, stakeholder needs and societal values. As restoration progresses, information from monitoring activities, research and stakeholder guidance should be integrated into management plans.

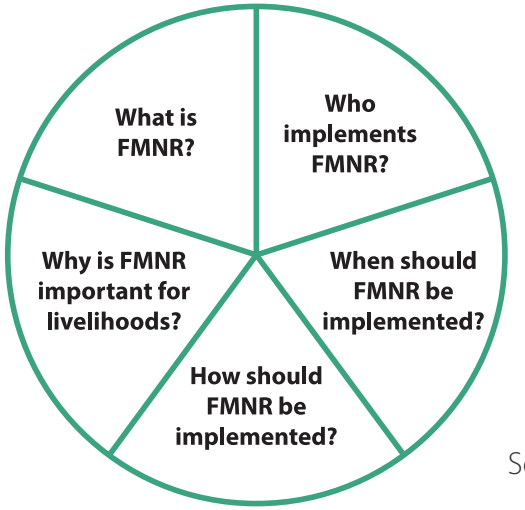
Source: IUCN (n.d.).

Annex 4. Benefits of FMNR

Economic benefits	Social benefits	Environmental benefits
• Increased crop yields (often double or triple) • Increased fodder from edible leaves and seed pods, and pasture for livestock. • Higher livestock productivity and survival. • Reduced impact from floods and drought – as trees provide alternative income and livelihood sources, impacts become less severe and recovery is faster. • Increased income generation through diversification and intensification of activities, such as selling tree products. • Economic flow-on effects such as employment and greater purchasing capacity. • Increased economic activity creates opportunities such as the development of new business models including cooperatives and savings groups.	• Increased crop yields (often double or triple). • Increased fodder from edible leaves and seed pods, and pasture for livestock. • Increased food security and nutrition (incorporating native • fruits, nuts and seeds). • Less distance for women and children to travel to collect firewood. • Community capacity building can help people deal with local, regional and national governments and regulators. • Improved governance through clarification of tree ownership laws and regulations. • Education and training in farming and marketing. • Reduced need for young people and men to migrate to urban areas. • Higher incomes result in better opportunities such as medical treatment, children's education, nutrition and clothing. • Empowerment of community members to live independently with hope for the future.	• Increased crop yields (often double or triple). • Increased fodder from edible leaves and seed pods, and pasture for livestock. • Reduced soil erosion. • Reduced soil-moisture evaporation due to windbreaks, shading and mulching. • Increased soil fertility through organic matter from trees. • Improved soil structure through greater quantities of organic matter. • Increased water infiltration and groundwater recharge. • Increased biodiversity, environmental restoration and tree cover. • Enhanced resilience to climate change.

Source: World Vision Australia, 2018.

Annex 5. Wheel of questions for FMNR



Source: Adopted from Fischer at al., 2019.

APPENDIX

Appendix A. FMNR workshop concept: Content and schedule (one-day)

Produced in cooperation between World Vision Germany, World Vision Kenya and World Vision Ethiopia under the BMZ-financed project, 'FMNR Scale-Up Project in Ethiopia and Kenya'.

Time	Unit/Module	Module content	Module format	Module outcomes	Training materials
08:30 – 09:00		Participant registration		Participants are registered.	Participant registration form (paper-based or digital)
Learning unit 1: Workshop opening					
09:00–09:15	1.1 Welcome and introduction	Workshop facilitators welcome participants, present themselves and the general reason for the workshop (if the workshop is held as part of a project, the project background may be briefly described). Afterwards, depending on the cultural context and group size, each participant may be given the chance to briefly introduce themselves (name, home community, etc.)	Presentation and plenary discussion	▸ Participants know the main thematic focus of the workshop ▸ Participants and workshop facilitators get to know each other	Flip chart prepared with a welcoming cover page

09:15–09:20	1.2 Didactic principles and rules of the workshop	This module introduces some principal learning principles and rules for this workshop (based on common adult learning principles): mutual and experiential learning, reflection, networking.	Presentation and plenary discussion	▸ Participants are aware of basic didactic learning principles for this workshop ▸ Participants are aware of basic behaviour rules during the workshop	Flip chart with main principles and rules (which could be hung up on the wall in the training room)
09:20–09:30	1.3 Workshop content and learning objectives	The workshop content and learning objectives are introduced. This module should also include options for participants to express their expectations and learning objectives.	Presentation and plenary discussion (with the option of participants to express their learning objectives, that are noted down on a flipchart)	▸ Participants are aware of the scope and content of the workshop ▸ Participants have shared their learning objectives and expectations (if applicable) ▸ Participants and workshop facilitators have agreed on the learning objectives of the workshop	Flip chart with overview on workshop scope and content Flip chart with summary of learning objectives of participants
09:30–09.45	1.4 Pre-workshop evaluation	To evaluate the learning outcomes of the workshop, participants will fill out a self-assessed workshop evaluation form before and after the training with questions relevant to the workshop content and modules. For illiterate participants, this could also be done through facilitation of a workshop facilitator.	Evaluation form/ questionnaire (this should be brief and concise and focused on the relevant training aspects)	▸ Participants have assessed their knowledge and capacities on FMNR prior to the workshop	Pre-workshop evaluation forms, pens
Morning tea (09:45–10:00)					
Learning unit 2: Environmental degradation, deforestation and natural resource management					
10:00–11:15	2.1 Linkage diagrams on environmental degradation, deforestation and natural resource management	In this module, participants will reflect on components and factors of environmental degradation, deforestation and NRM in their personal life context. This will be done through the drawing of a linkage diagram that allows the mapping/visualisation of components and factors as well as their interlinks. The linkage diagrams will reveal how participants perceive environmental degradation and deforestation in their household and community, what factors they link to the two concepts, and how they understand them.	Linkage diagrams	▸ Participants have reflected on and identified key aspects of environmental degradation in their personal context ▸ Participants have reflected on and identified key aspects and drivers of deforestation in their household and community ▸ Participants have reflected on and identified current NRM strategies and practices in their household and community	Flip chart paper (one for a group of 4 to 6 participants), pens of different colors

11:15–11:45	2.2 Basics of environmental degradation, deforestation and natural resource management	This module gives a brief introduction to the three concepts and their main interrelations. Wherever possible, workshop facilitators will make links to the results from the linkage diagrams.	Presentation and plenary discussion	▸ Participants know key aspects of the concepts of environmental degradation, deforestation and NRM ▸ Participants are aware of the major links between the three concepts ▸ Participants are aware of the main livelihoods' implications of environmental degradation and deforestation	Flip chart, pens
11:45 –12:15	2.3 Introduction to community-based forest and landscape restoration (FLR)	In this unit, participants are briefly introduced to the concept of community-based forest and landscape restoration (FLR). The aim is that participants understand tree and vegetation protection as a potential solution to end deforestation and land degradation. To this end, workshop facilitators will present the basic environmental benefits of trees and vegetation for microclimates, soil structure and quality, and water management.		▸ Participants have a basic understanding of the concept of community-based forest and landscape restoration ▸ Participants are aware of positive environmental implications of trees and other vegetation on microclimate, soil structure and quality, and water systems	
Lunch (12:15–13:00)					
Learning unit 3: Farmer Managed Natural Regeneration (FMNR)					
13:00–14:00	3.1 Introduction to FMNR	In this module, the concept of FMNR is introduced using the 'wheel of questions', disucssing the 'What? Why? Who? Where? and How?' of FMNR. The session will allow participants to reflect on and discuss each of the five questions, with workshop facilitators providing input on key aspects for each question. This will also include a presentation of major livelihoods benefits that FMNR can support.	Format: Wheel of questions (participatory design)	▸ Participants understand that FMNR focuses on the rehabilitation of existing vegetation ▸ Participants understand the difference and relationship between FMNR and tree planting ▸ Participants are aware that FMNR includes the technical practice and community development process ▸ Participants are aware of the environmental and potential livelihoods benefits that FMNR supports ▸ Participants know that FMNR is a continuous action that requires the support of the entire community	Flip chart, pens, video material (optional)

				▸ Participants understand that FMNR needs to be integrated with other livelihoods actions and NRM practices	
14:00–14:15	3.2 FMNR as a technical practice	This module introduces the practice components of FMNR (select, prune, manage, utilise) and practical tips for each step.	Presentation and plenary discussion	▸ Participants know the four practice components of FMNR ▸ Participants have a good theoretical understanding of the practical execution of each practice	Flip chart, pens, video material (optional)
14:15–14:45	3.3 FMNR as a community development process	The process components of FMNR (connect, plan, enable) are introduced with the aim of participants understanding that FMNR requires the establishment of certain community structures and institutions/rules (e.g., on the use and management of trees and other natural resources).	Presentation and plenary discussion	▸ Participants know the main process components of FMNR ▸ Participants are aware of key structures and institutions needed to establish FMNR within the community (e.g., NRM committees, by-laws, land use plans, etc.)	Flip chart, pens, video material (optional)
14:45–15:15	3.4 Scope for applying FMNR	This module introduces the different landscape types and purposes that FMNR could be applied for (e.g., farmland, grazing land, forestry).	Presentation and plenary discussion (with case studies/ examples)	▸ Participants know the different landscape types that FMNR can be applied on ▸ Participants are aware of the different purposes FMNR can be applied for	Flip chart, pens, video material (optional)
Afternoon Tea (15:15–15:30)					
Learning unit 4: Workshop closing					
15:30– 16:15	4.1 Wrap-up and post-workshop evaluation	The module contains a wrap-up of the workshop through a brief summary on the main modules and aspects. Participants will also conduct a self-assessed post-workshop evaluation based on an adjusted evaluation form (with most questions remaining the same as for the pre-workshop evaluation).	Presentation and post-workshop evaluation form	▸ Participants were able to clarify remaining questions on the topics and concepts addressed in this workshop ▸ Participants have reflected on their learnings and filled out the post-workshop evaluation form	Post-workshop evaluation forms, pens
16:15	End of workshop				

Appendix B. FMNR workshop concept: Content and schedule (one-day)

Stakeholder FMNR awareness, knowledge, commitment and capacities evaluation

Date: _____

Location: _____

Dear training participant,

Thank you for agreeing to participate in this evaluation. The evaluation is part of FMNR training you are attending or have attended. We ask you to please take time to complete this questionnaire (five sections). Please respond to questions below as per instructions under the relevant sections and – if you wish – provide additional comments in writing. This evaluation will be repeated throughout the course of the training for comparison's sake and to help assess the impact of the training. Thank you for your kind cooperation!

Data privacy statement: The provision of information in this questionnaire is voluntary.

Section 1: Awareness of FMNR

Instructions: Please rate below (X) to what extent each statement applies to you.

#	1 = very low 5 = very high N.A. = not applicable / can't answer	1	2	3	4	5	N/A
	How would you assess…						
1)	Your general level of awareness on FMNR? (Have you heard about FMNR before?)						
	Comment:						
2)	Your awareness on the benefits of FMNR? (Are you aware of positive impacts of FMNR?)						
	Comment:						
3)	Your knowledge/understanding on the current spread (scope of application) of FMNR in your country?						
	Comment:						
4)	Your knowledge/understanding on the current potential (scope of application) of FMNR in your country?						
	Comment:						

Section 2: Knowledge of FMNR

Instructions: Please rate below (X) to what extent each statement applies to you.

#	1 = very low 5 = very high N.A. = not applicable / can't answer	1	2	3	4	5	N/A
	How would you assess…						
1)	Your general level of knowledge on FMNR? (What is FMNR?)						
	Comment:						
2)	Your knowledge on the three dimensions of FMNR (technical practice, community development process, mindset transformation)?)						
	Comment:						
3)	Your knowledge on the relationship between FMNR and tree planting?						
	Comment:						
4)	Your knowledge on how FMNR is integrated with other natural resource management and/or livelihoods activities?						
	Comment:						

Instructions: Please check (X) below only one single response for each question (there is only one clear and correct answer for each question).

1) What does FMNR stand for?
- ❒ Farm Managed Natural Restoration
- ❒ Farming for Maintaining Natural Resources
- ❒ Farmer Managed Natural Regeneration
- ❒ Family Managed Nutritional Recovery

2) How would you describe the relationship between FMNR and tree planting?
- ❒ FMNR and tree planting are conflicting concepts and not combinable
- ❒ FMNR and tree planting are the same
- ❒ Tree planting can be a complementary component to FMNR
- ❒ Tree planting constitutes the first step of FMNR

3) What are the main steps of practicing FMNR?
- ❒ Select species and stumps or trees, prune and manage, maintain and utilise
- ❒ Select and produce species of seedlings, plant and manage, maintain and utilise
- ❒ Select and purchase species of seedlings, plant and manage, maintain and utilise
- ❒ Select species and trees, cut down trees, replant them in more suitable environment, maintain and utilise

4) For what type of landscapes is FMNR a suitable landscape restoration method?
- ❒ Forest and farming land
- ❒ Forest land
- ❒ Forest and grazing land
- ❒ All of the above

5) FMNR is usually cheaper than tree planting?
- ❒ True
- ❒ False

6) FMNR is not a stand-alone approach and needs to be integrated with other natural resource management and/or livelihoods actions.
- ❒ True
- ❒ False

Section 3: Capacities on FMNR

Instructions: Please rate below (X) to what extent each statement applies to you.

#	1 = very low 5 = very high N.A. = not applicable / can't answer	1	2	3	4	5	N/A
	How would you assess…						
1)	Your ability to explain FMNR?						
	Comment:						
2)	Your ability to include/apply/promote FMNR in your daily work?						
	Comment:						
3)	Your ability to introduce/promote FMNR to within your organisation/workspace?						
	Comment:						
4)	Your personal need for further capacity building on FMNR?						
	Comment:						
5)	Your ability to practically demonstrate FMNR?						
	Comment:						

Instructions: Please indicate below to what extent each statement applies to you.

1) Have you ever participated in a training session on FMNR practitioners?

❒ Yes

❒ No

i. If yes, how many?

❒ 1

❒ 2-5

❒ >5

2) Have you ever facilitated a practical training session on FMNR?

❒ Yes

❒ No

i. If yes, how many?

❒ 1

❒ 2-5

❒ >5

ii. If yes, for which stakeholder groups?

❒ Government extension staff

❒ Implementing partners

❒ Lead farmer

❒ Follower farmer

❒ Other (please specify below)

_____

3) Have you ever visited a FMNR demonstration site?

❒ Yes

❒ No

Section 4: Commitment to FMNR

Instructions: Please rate below (X) to what extent each statement applies to you.

#	1 = very low 5 = very high N.A. = not applicable / can't answer	1	2	3	4	5	N/A
	How would you assess…						
1)	Your motivation/willingness to apply/promote/include FMNR in your daily work?						
	Comment (kindly specify type of activities – e.g., policy development, strategy discussions, provision of trainings, mass communication, relevant events, etc.):						
2)	The likelihood that you will apply/promote/include FMNR in your daily work in future?						
	Comment:						
3)	The obstacles to apply/promote/include FMNR in your daily work?						
	Comment:						

Additional information to support this training (optional)

#	Question
1)	Which specific stakeholders would you recommend the training should involve?
	Comment:
2)	What recommendations do you have for the training?
	Comment:

Additional information to support this training (optional)

Thank you very much for your participation in the evaluation!

If you have questions about the evaluation or project, please feel free to contact _____ in your respective country, indicated below.

Country
Name: Position: Organisation/Office: Phone: E-Mail: Skype:
Name: Position: Organisation/Office: Phone: E-Mail: Skype:

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by:
giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

World Vision

World Vision Deutschland e. V.
Am Zollstock 2-4 • 61381 Friedrichsdorf
phone: +49 6172 763-0
info@worldvision.de

Berlin office
Luisentraße 41 • 10117 Berlin

worldvision.de