Chapter 2

Using FMNR in a development program

Summary: Using FMNR in a development program

- FMNR is a practice that can contribute to a range of desired development outcomes, including:
  - livelihood development
  - sustainable agricultural production systems
  - land restoration
  - climate change mitigation and adaptation
  - disaster risk reduction
  - community development
  - children's well-being

- FMNR can also be used in many contexts. Development organisations should consider this practice, especially in contexts where:
  - Land degradation has exacerbated food insecurity, drought, conflict or the resilience of vulnerable people, as FMNR tends to be more readily adopted in areas where people have few immediate alternative options.
  - The area was historically forested, is near a forested area, or there is evidence of stumps or seeds, bush encroachment or successful re-greening efforts present.
  - Local communities have expressed interest in addressing local land degradation issues, or are open to discussions about this.
  - The goals of FMNR link to organisational strategies and available investment opportunities.

- FMNR can be easily integrated into a range of different program areas, including: water, sanitation and hygiene; disaster risk reduction; education; nutrition and health; agricultural and natural resource management; and humanitarian and emergency response and food security programs.

Resources

- **Annex 1** provides a set of questions for taking stock with the community. These questions can also be useful for a preliminary assessment of the appropriateness of FMNR for an area, prior to meeting with the community.
- The **Restoration Diagnostic** is one tool in the more comprehensive **Restoration Opportunities Assessment Methodology** which can be used to help to identify key success factors, identify gaps and develop strategies for land restoration through FMNR.

The FMNR project approach

This manual has two aims: to support project-based approaches to implementing FMNR; and to build an independent FMNR movement.

In general, any FMNR activity, either at a community or multinational program scale, begins by considering the challenges being faced and what FMNR can contribute in improving environmental and human well-being.

Early in any FMNR intervention should be a process of 'taking stock' with the community to understand their situation, needs and goals for the future (**Chapter 3**). Once the community has considered FMNR of value and has committed to working together to apply it in their area, you are ready to start planning your FMNR work. This starts by working with the community to undertake a stakeholder analysis, develop an FMNR action plan (**Chapter 5**), and potentially a project proposal to a donor, or a project plan if resources are already available.

Any FMNR initiative has both **practical skills** (**Chapter 4**) and **community ownership** (**Chapter 5**) at its centre. Many of the activities supporting an FMNR project are focused on these two things, and may include FMNR champions, trainings, demonstration sites, FMNR groups, awareness-raising events, awards, school programs, community FMNR working days, resource centres and the development of community agreements and bylaws. A **positive enabling environment**, with supportive policies and strong links to viable markets for FMNR-related products, ensures that any benefits of FMNR are available to those practising it – and that those people continue to reinforce its adoption. When FMNR is successful in a community, its processes and benefits and stories of change should be shared widely. This fuels the **movement and the spread of FMNR to others** through media, exchange visits, multi-stakeholder platforms, conferences, and workshops and events.

Partnerships (**Chapter 8**) support activities at all levels, between organisations and individuals working within the community, to governments, research organisations, NGOs, national and international organisations, which can take FMNR to new areas. **Monitoring and evaluation** (**Chapter 10**) is critical to not only check progress is being made towards the community's goals, but also to build an evidence base of FMNR approaches and outcomes across different contexts.

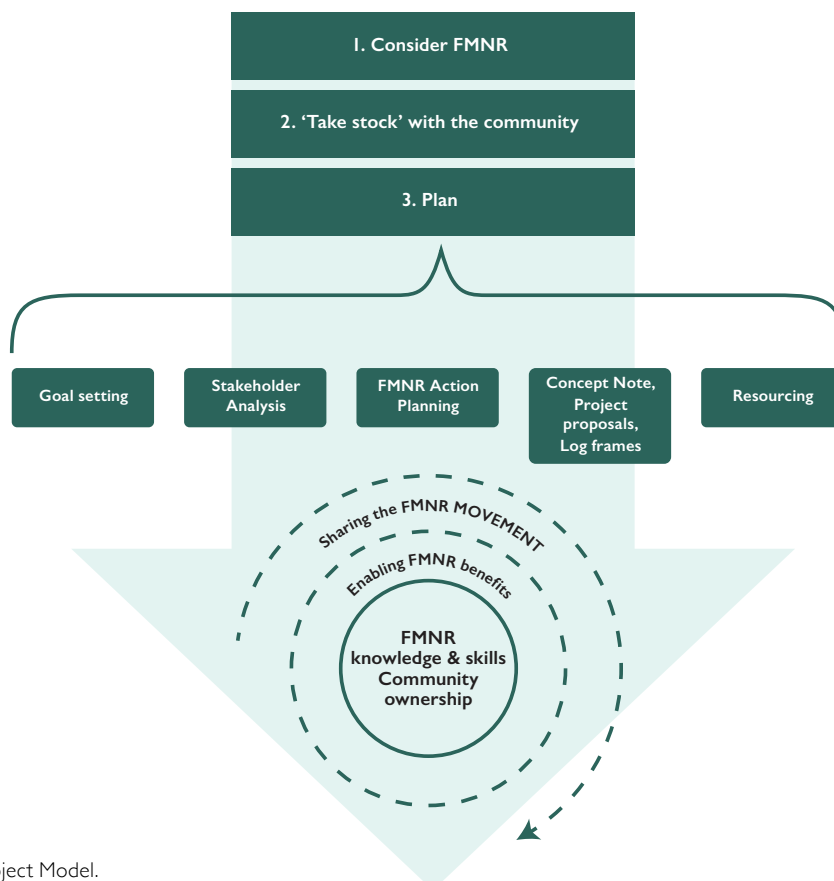These components of the FMNR model will be described in more detail throughout this manual.

Figure 1 The FMNR Project Model.

When should FMNR be considered?

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 loss of tree cover is negatively affecting human well-being, and where living tree stumps or self-sown seeds exist in the landscape.

Some indicators that FMNR could be useful to the community include:

- signs of decreasing income for people working in natural resources, such as farmers, herders or sellers of wood, charcoal or honey;
- farmers replanting crops one or more times during a season due to drought, flood or wind damage;
- lower crop yields due to soil erosion, drought, flood or wind damage, lack of access to fertiliser, poor or decreased water retention and poor soil fertility;
- loss of tree cover negatively impacting crop yields and livestock productivity;
- loss of critical levels of environmental biodiversity and a desire from the community to restore this;
- community members forced to migrate for work due to decreased crop yields and farm profits;
- tree loss causing or increasing the severity of winds, drought, floods, higher temperatures, dust storms or decreasing seasonal water flow and well recharge, making environments less habitable;
- low food, income and income diversity wholly or partly due to the above factors, increasing the risk profile of the community;
- productive land lost through erosion and deteriorating climatic conditions;
- fluctuations between too much and too little rain, and a tendency towards greater variability in rainfall;
- streams not flowing as much, as early or as long as in the past, or wells drying up for part of the year;
- insufficient wood for building, or too much time and distance spent collecting firewood for cooking; and
- resource-based conflict, eg. between agriculturalists and pastoralists, or between government efforts to protect forests and citizen efforts to survive and provide for families.

If one or more of these problems exist in a community, it's worth considering if FMNR can make a cost-effective contribution towards resolving them. When first considering whether to include FMNR in a program or project, a range of environmental, social and economic considerations should be taken into account through a needs assessment to determine the suitability of FMNR in a new area. These are described in more detail below.

More detailed 'taking stock' assessments should be done with the community before a project can start assessing people's interest in FMNR, build commitment and support and also shape how the project may be designed for the best chance of success. A preliminary review of these questions will also help development staff assess the suitability of FMNR at a specific project or site level, before going to the community as well (see **Annex 1**).

It's not uncommon for communities and even NGO project staff to be disinterested in FMNR at first. The reasons for this and ways to tackle this challenge are discussed later in this manual (**Chapter 6**). The point being, if you think FMNR is an appropriate tool, do not be discouraged by initial resistance. If possible, spend some time dispelling concerns and fears.

Environmental considerations

FMNR may prove to be a valuable starting point for addressing land degradation issues, especially when in areas where food insecurity, drought, conflict and other symptoms of poor environmental resilience to climatic and environmental shocks are the result.

Climate

FMNR can be practised on any land that has living tree stumps capable of resprouting or that is growing self-sown trees. To date, FMNR has most frequently been implemented in dry land environments, receiving roughly up to 1,200mm of annual rainfall, with existing root stock and stumps. However, it can also be practised in more humid environments. The principles remain the same, but the exact practices may vary according to context. Characteristics such as available species, soil quality, density of existing plants and water availability will affect the growth rate of trees and may mean that more or less frequent pruning is required. In areas where no tree stumps occur and there are few tree seeds in the soil, or where land users want to speed up the process, steps additional to FMNR – such as sowing seeds directly, planting seedlings and or taking truncheons (large cuttings of suitable species) – may be taken.

Very dry areas may present extra challenges, or mean that regenerating trees grow more slowly. Nevertheless, it can be surprising to see how fast trees can grow from stumps, even in dry environments; living tree stumps have been found in desert conditions with very low rainfall (50-100mm per year).

Always experiment to see if FMNR can be useful. For example, respectable growth rates have been achieved in arid parts of Somaliland by digging half-moon water catchments, which trap water run-off at the base of FMNR trees.

Historic tree coverage

It is also necessary to consider whether forests were present in the past and, if so, the current state of the forest. Surprisingly, in some areas deforestation occurred so long ago that people are unaware there is a problem; they've come to believe treelessness is the land's natural state, and they might not expect trees can survive there.

To gauge the extent of deforestation in an area, certainly consult the community, especially the elders, but also triangulate by checking historical records such as mapping of landcover or historic land uses and observations. In almost every situation you will find 'sentinel' trees, which provide a glimpse into what might have been and what could be again through FMNR and possibly tree planting. If the area was forested in the past, reforestation is more likely to be possible.

Presence of stumps, roots or seeds

Are there sprouting tree stumps, roots and or seeds present? You will need to physically inspect the landscape – preferably in areas where there have been no fires for at least six months. If livestock continuously graze the same area, you will need to look particularly closely to find signs of woody vegetation with the potential to grow into trees and shrubs. Also consider what species are present. Generally, coniferous species such as pines and cypress do not sucker once cut down. Pines, for example, die after being felled. Species present need to have the ability to resprout. Alternatively, there needs to be a 'bank' of seeds in the soil to regenerate or a source of seed, such as forests nearby, and vectors such as birds, wildlife and livestock. Often, even where there are non-suckering species, if there are remnant trees then regeneration through seed may be occurring, but threats such as fire, constant grazing or cultivation may prevent the seedlings from establishing.

Landscape restoration needs

In order to manage issues such as low groundwater, and to stabilise soil erosion and reduce weeds at a landscape scale, it is necessary to consider the whole water catchment. Often there are areas of land on the hillslopes in upper catchment areas, in gullies or along waterways that may be degraded and affecting dynamics such as water availability across the broader catchment. In projects focusing on landscape-scale restoration or improvement, consider whether these areas benefit from FMNR. When it comes to degraded communal land, FMNR can help provide cost-effective methods of stabilising soil and recharging groundwater for the benefit of the entire catchment. Furthermore, these communal areas can become a sustainable source of firewood and off-farm tree products for landless or disadvantaged community members who may not have access to such products on their own. In Ethiopia, local community leaders have allowed disadvantaged women in their community to access communal hillsides restored with FMNR to collect firewood and non-timber tree products to supplement their incomes as well as provide ongoing management of regenerated trees.

Social considerations

Often, what prevents regeneration from occurring is a combination of people's beliefs and attitudes about trees and prevailing land and vegetation management practices. When changes to these practices are made, spontaneous regeneration has occurred on seemingly treeless land, making FMNR possible.

Social conditions that may make FMNR difficult include:

- **Volatile conflict situations** where trees may be damaged frequently. Negotiating community agreement around the management and protection of trees may not be possible and pruning may be too difficult to complete safely.

- **Urban settings**, which may not have the necessary tree stumps or social cohesion required for practising FMNR on public or communal land. However, FMNR may still be possible in school and hospital yards, and along kerbsides. And, of course, anyone can manage trees on their own land using FMNR principles.

- **Peri-urban settings**, which pose problems where high densities of people rely on firewood for their fuel supplies. Similar levels of low social cohesion as in urban areas can make it difficult to collaborate with communities.

- **Areas where large numbers of livestock are regularly grazed.** These will present greater challenges because livestock can damage young growth.

- **Areas where land is burnt every year** and there is low community will to change this practice.

FMNR and conflict resolution

Despite its challenges, the authors have seen many situations where conflict was decreased through FMNR. This may be because, as trees grow, more natural resources become available and there is less competition for scarce resources. Also, the decision for stakeholders to practise FMNR involves consultation and agreement around how to best manage natural resources to everybody's benefit. The collaboration and transparency required to do this may also reduce the incidence of conflict. In a very real sense, FMNR can connect parties that experience differences.

You can read more stories about how FMNR is contributing to overcoming areas of conflict here:

FMNR reconciliation trees in Rwanda

Conflict resolution through sustainable management of trees in Ghana

The important thing to remember is that obstacles are surmountable: there are plenty of cases of communities overcoming great obstacles to take inspiration from.

Economic considerations

Monetary considerations are critical, because they're a major co-benefit of FMNR that affects people's motivation to act. Consider whether the species present are of economic value, either directly – through fuel, timber, fodder, medicine, etc – or indirectly, through tourist revenue, honey, reduced erosion, reduced wind damage to crops and increased pollination. A study undertaken in Kenya's Rift Valley, which used economic modelling to predict just a few benefits of FMNR, found a roughly 10 percent improvement in the economic well-being of grazing systems in a good year and, during low rainfall periods, an improvement of 200-500 percent.[1]

It is also worth considering if the project aligns with global restoration initiatives such as the Bonn Challenge, Global Restoration Initiative, AFR100 (the African Forest Landscape Restoration Initiative) or Initiative 20x20 in Latin America, which can provide an opportunity to work with national governments to contribute to their global commitments. Alternatively, consider whether there are funding or financing opportunities available to landholders in your project areas, based on their contributions to global carbon or land restoration objectives.

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[1] Van Schoubroeck, F. 2018, "Integrating Trees in Farming Systems in Baringo county, Kenya reduces variability of food and fodder production", FarmTreeServices

Combining FMNR with other program approaches

Because FMNR empowers people and communities, and requires the inclusion of all groups who use or have access to the land, projects can benefit by supporting efforts such as women's empowerment, assistance to ethnic or other minorities and similar interventions.

FMNR is a foundational intervention. Therefore, it can be implemented with any programming that can benefit from healthy, functioning ecosystems, functional water cycles, increased and more secure access to food and income, or reduced climate impacts. In fact, most, if not all, sectors benefit from this 'no-regrets' technology. Some of these sectors include:

- disaster risk reduction and climate change adaptation
- humanitarian and emergency assistance
- water, sanitation and hygiene (WASH)
- food security, nutrition and/or agriculture
- education and youth engagement
- income generation and economic development
- environment and/or climate change projects

How FMNR contributes to each of these sectors is described below.

Disaster risk reduction and climate change adaptation

Figure 2 FMNR can add value to a wide range of common development activities undertaken by NGOs around the world. World Vision in Nakuru, Kenya (May 2018). Photo: A. Muller

In places where communities are affected by disasters and climate change impacts, such as drought, flooding, crop loss, famine or the effects of pests on crops and people, FMNR may be valuable for reducing these risks. Increased tree cover helps reduce wind speed, high temperatures, water run-off and flooding while also increasing the productivity of the land. Regenerated wetlands and forests can also reduce the risk of storm surge, coastal erosion and wind speed.

The environment provides resources and livelihood opportunities as well as presenting risks. Community activities such as farming, grazing and extraction of natural resources can all take place in high-risk locations, such as volcanic soils and alluvial plains. While these are highly fertile areas, they can also be vulnerable to erosion and flooding.

The most marginal groups in society are often located in unproductive or risk-prone lands. Their choices are often limited by the socio-economic factors they live under, particularly with regards to land tenure and distribution. As a consequence, community investment in risk-reduction measures in these areas may be very limited or even non-existent.

Activities such as FMNR that strengthen landscape resilience and long-term livelihoods are important disaster mitigation strategies. Following a disaster, FMNR activities can provide valuable assistance in the recovery of affected landscapes. If associated with food-for-work or cash-for-work programs, it can contribute towards short-term emergency relief while also supporting the re-establishment of livelihood systems.

Humanitarian and emergency assistance

FMNR has been successfully included in humanitarian and emergency assistance programs in a number of different countries. This is often in areas that have become extremely degraded because of disasters, such as drought or famine, or because of an influx of people through mass migration or establishment of refugee camps. FMNR can be used to quickly regenerate this land and provide a sustainable source of fuel wood. Programs such as cash-for-work and food-for-work are common in these contexts and have been used successfully to encourage people to implement FMNR across large areas. Beyond meeting initial needs, such as a sustainable source of firewood, FMNR also provides people with a productive resource to contribute to future income sources, and therefore increases the rate of recovery from such emergency situations. A **full report** on how FMNR has been implemented in one refugee camp context in northwest Uganda is available on the FMNR Hub website.

WASH

FMNR and the resulting increase in tree cover in a landscape provides improved water quality and availability through better infiltration, reduced erosion and improved filtering of sediment and some contaminants. As a result, FMNR can contribute to WASH objectives for improved water access and water quality in a community.

Case study

FMNR brings back the water

Farmer Managed Natural Regeneration was applied in East Sumba's dry land and it has changed the lives of villagers, especially children. In the driest parts of Sumba Island, villagers were forced to walk long distances to fetch water. Yovintus, aged eight, and Elton, aged seven, had to go to school without bathing since there was no water at home. But now, everything has changed.

There is a well located 200 metres from their home and the boys use jerry cans to fetch water for their family. "We can now take a bath every day because water is now abundantly available in our village," said Yovintus.

Because of FMNR there is still water in the well during the dry season. The trees that have been regenerated hold the water in the ground. Every afternoon, villagers come to the well to bathe, wash clothes and water cattle.

Figure 3 Yovintus and Elton fetch water from a well that has refilled since FMNR has been applied in the catchment. East Sumba (2016). Photo B. Mbete

"Before FMNR existed, the water was only available until August. After that time, people need to fetch water from a neighbouring village, 1.5 kilometres away. When the area really dries, we need to spend extra money from about 150,000 rupiah (US$10) or 300,000 rupiah (US$20) to buy water provided by the government," said Lusia, aged 26, a mother in the area. Today, there is sufficient water to meet people's needs. FMNR has brought many benefits to the village, especially for children like Yovintus and Elton

Food security and nutrition

A primary purpose of FMNR is to increase the productivity of degraded land. When this is agricultural land, FMNR increases farmers' ability to produce more food crops and livestock products with less inputs. In addition to improved production, certain species of trees regenerated through FMNR can also provide their own benefits including edible fruits and leaves and medicinal products. Increased access to firewood from trees closer to home makes cooking easier and therefore improves access to nutrients contained in foods such as grains and beans. Access to fodder from trees, shrubs or better grass growth supports livestock production (chickens, goats, cattle, etc) and helps provide families with important protein sources.

Education

School and youth environmental club programs aim to engage children and youth in environmental education. FMNR is a simple technology that can be easily adopted by children, and used to explain many environmental principles. Applying FMNR in schoolyards helps to improve learning environments (cooler, more shade, less wind) and provide valuable resources such as firewood closer to school kitchens. This reduces financial and time pressure on schools and students who are usually required to provide firewood from elsewhere.

FMNR implemented by children, or adults encouraged by children on home farms and communal land, reduces time required to fetch firewood or for grazing duties. As this work is often performed by children, it means they have more time to attend school and complete homework during the day.

More information about how to engage children in FMNR programs can be found in **Chapter 7**.

Income generation and economic development

Most developing economies rely predominantly on primary production from agriculture and natural resources. Therefore, to increase incomes and livelihoods at both a household and national level, a strong environment and natural resource base is important. FMNR can contribute not only to production of sustainable tree products that can be used to generate income (such as firewood, fruits, fodder or timber), it also improves the productivity of land used for growing crops and feeding livestock. By improving resilience to shocks such as drought, it helps households maintain an income source during difficult periods. FMNR is also often combined with value addition, savings and loan schemes, or market linkage interventions to enable land managers and communities to maximise income generation and economic development opportunities. See **Chapter 4** for more information about these interventions.

Environment conservation and climate change mitigation

FMNR seeks to increase tree cover in the landscape by integrating trees into farmland and restoring degraded forests. Including more trees in the landscape allows for the sequestration of greater volumes of carbon, mitigating further exacerbation of climate change impacts.

FMNR's emphasis on conserving indigenous tree species is valuable for maintaining species diversity. When FMNR is led by the community, traditional knowledge around these species and their uses is also conserved.

'Re-greening the mindset' through FMNR community engagement and experience results in land managers who value indigenous species and vegetation cover, and who are less likely to use environmentally destructive practices such as tree clearing and unsustainable charcoal and firewood generation.

FMNR global priorities

We have discussed ways that FMNR integrates with other types of programming, but it is also useful to understand how it contributes to global priorities that affect policy agendas, potential funding opportunities and exposure for FMNR.

Sustainability

Sustainability is one of the highest priorities for FMNR, and is also a priority for donors and policy makers. The ultimate goal for FMNR projects is for the community to manage their natural resource base in a way that continually replenishes the foundation of their food, water, shelter and livelihood systems. This is accomplished through the community's FMNR work as well as by collectively managing, protecting and governing the benefits of that work, and by ensuring that the local policy environment empowers land users to enjoy those benefits.

FMNR projects work towards sustainability in a number of ways:

- **FMNR is self-sustaining and replicable**. Its growth beyond project boundaries is primarily due to community members themselves, without project or government involvement or funding. Once started, the movement is generally maintained and spread using local initiative and resources.
- **FMNR increases social and financial sustainability.** FMNR has made rural areas more financially viable, improved physical living conditions and enhanced food security and livelihoods. In some regions, land users who have fully adopted FMNR have seen their average household income and value of consumed FMNR-related products increase by between US$200 to $1,000 per year. There is also less pressure on men to leave home during the dry season and seek work elsewhere – a common practice that places large strains on families and their health. Women and children spend less time collecting firewood, and have more time for productive activity and education.
- **FMNR restores and supports environmental sustainability.** By restoring tree cover, crops and livestock are less exposed to high temperatures, floods or strong, sand-laden winds, so land users are less likely to replant crops and animals endure fewer stresses. FMNR can also help improve biodiversity, as wildlife and birds return when vegetation and indigenous tree and plant species are restored. Water and wind erosion of barren landscapes decrease, and water infiltration increases so that natural springs and streams may resume flowing, or become available for longer, or even year-round.

Building resilience and safeguarding

Safeguarding has become increasingly important in recent years, especially with the increased potential of climate change mitigation efforts to cross national borders, and with increased recognition that local communities have often managed their land sustainably for generations.

Safeguarding policies and practices exist to ensure that local communities and their traditional knowledge of natural resource management are protected when implementing development and other programming. Safeguards are ultimately intended to ensure that local people have the power and support to secure and sustainably manage their resources and assets.

Safeguarding is a critical component of FMNR, which is based on the principle of community ownership and empowerment. From initial introductory meetings with a community through to project exit, FMNR ensures that the community's existing knowledge, traditional approaches and understanding of their resource base are the basis of programming, and that they maintain control of the process and benefits of FMNR to meet their specific needs. FMNR works not only with indigenous knowledge, but also with indigenous trees, and regenerates environments based on their natural capacity and characteristics.

Figure 4 FMNR can provide a foundation for building sustainable and resilient landscapes, capable of supporting healthy and productive communities into the future. Kerio Valley, Kenya (May 2018). Photo: A. Muller

Providing opportunities for youth

Many countries already struggle to educate and provide jobs for their young people – a population expected to increase significantly in coming years. As land degrades and rural livelihoods suffer, youth are likely to struggle to make a viable living in the same ways that their elders did.

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. By increasing income for adults, children and youth are more likely to remain in school and complete their education. By fostering inclusion and empowerment, FMNR can also help communities to instil interpersonal skills and a sense of capacity in their youth that will serve them as adults.

Assisting the most vulnerable

Definitions of 'most vulnerable' populations differ across agencies, countries and areas of focus, but generally include chronic and extreme poverty and/or social marginalisation as characteristics. FMNR works to address both challenges by increasing the amount and sustainability of incomes over time, and by requiring inclusion of all groups who use or have access to the land. The community engagement and shared decision-making components of FMNR can help to reduce the vulnerability of minority groups, whether based on age, gender, tribe, religion, landholder status or vocation.

FMNR contributions to the Sustainable Development Goals

FMNR contributes to and supports progress towards the majority of the United Nations **Sustainable Development Goals (SDGs)**. It provides a direct contribution to the following four goals:

SDG 1. No Poverty – FMNR contributes to ending poverty for local communities both by increasing income and by increasing the sustainability of land-based livelihoods due to improved natural resource base.

SDG 2. Zero Hunger – FMNR contributes to ending hunger and improving nutrition by improving soil fertility and crop viability, increasing access to wild foods and animal fodder, reducing stresses for livestock and decreasing disaster risk to food supplies.

SDG 13. Climate Action – As previously described, FMNR contributes to both the mitigation of climate change and to each community's ability to adapt to it. FMNR increases the number of trees sequestering carbon, reduces the burning of fields and the need for agricultural chemicals, and improves the soil's capacity to absorb carbon. FMNR also builds resilience among communities, by altering the micro-climate of crops, protecting them from extremes of heat and wind, reducing erosion by slowing wind and water speed, increasing water retention and infiltration, increasing soil complexity, diversifying food sources, and increasing capacity for advocacy and collective action. FMNR also qualifies as a climate change mitigation methodology under United Nations climate action initiatives such as the Clean Development Mechanism and REDD+.

SDG 15. Life on Land – FMNR contributes directly to every element outlined in goal 15, which aims to ''[s]ustainably manage forests, combat desertification, halt and reverse land degradation [and] halt biodiversity loss''.

In addition to these goals, common outcomes of FMNR also contribute to the following SDGs:

SDG 3. Good Health and Well-being – FMNR can contribute to communities' ability to access healthcare through increased income, and can also contribute to improved nutrition and increased availability of plant-based medicines.

SDG 4. Quality Education – FMNR can enable communities to access education for children through improved income and by reducing the need for children to contribute towards household income or devote excessive time to seeking firewood. Because of its focus on gender and minority group inclusion and empowerment, FMNR may also help to shift attitudes towards the education of girls and other marginalised groups.

SDG 5. Gender Equality – Inclusion and equality of women are key components of FMNR. FMNR not only seeks to lighten the burdens of women and girls by increasing access to resources such as firewood, but also seeks to improve their status as decision-makers who control assets, income and land rights equally with men. FMNR empowers women to benefit from their labour and increase their assets.

SDG 8. Decent Work and Economic Growth – FMNR helps to make traditional livelihoods sustainable and productive and increases opportunities for decent work that restores and enhances productive resources in a community.

SDG 10. Reduced Inequalities – FMNR can help to reduce income inequalities within communities and between communities as well, potentially reducing the need for economic migration.

SDG 11. Sustainable Cities and Communities – FMNR contributes to local communities becoming more inclusive, safe, resilient and sustainable. Through FMNR, incomes rise and resources – including food, water, timber and firewood – can increase, contributing towards the sustainability of cities and communities.

SDG 12. Responsible Consumption and Production – FMNR contributes to the sustainable consumption and production of wood and other forest products, as well as to sustainable agricultural production.

SDG 16. Peace, Justice and Strong Institutions – FMNR can contribute significantly to promoting peaceful and inclusive societies for sustainable development, improving access to justice for all users of the land under management, and building effective, accountable and inclusive institutions at all levels. Anecdotal evidence indicates that, as resource availability expands because of FMNR, conflict over scarce resources has reduced. See the case studies in **Chapter 6** for examples of this.