



Regreening Africa



OUTCOME STORY FOR ETHIOPIA

Integrating Farmer Managed Natural Regeneration (FMNR) into government's restoration plans and initiatives



Summary of the change

Ethiopia, a pioneer in landscape restoration in Africa, has set ambitious targets for achieving a carbon-neutral and middle-income economy by 2030. While the country has employed various approaches to land restoration, including large-scale tree planting campaigns, these efforts have faced numerous socio-economic, cultural, and ecological barriers such as low seedling survival rates in dry areas, lack of post-planting care, and limited farmer participation and ownership. To address these issues, the Regreening Africa projectⁱ and partners have successfully initiated engagements and advocacy processes for the integration of Farmer Managed Natural Regeneration (FMNRⁱⁱ) into national and local restoration interventions led by government agencies. As a result of these engagements, FMNR has now become part of restoration campaigns initiated by key ministries, regional and district governments, as well as development agents and officials. This outcome represents a significant shift in policy, practice, and behaviours toward land restoration practices.



Context

Ethiopia has a long history of landscape restoration initiatives. In July 2019, the country set a new world record by planting over 350 million trees in a single day as part of the government's Green Legacy Initiative (UNEP, 2019). The initiative aimed to plant 20 billion trees between 2021 and 2025 to combat environmental degradation, deforestation, and climate change. Additionally, in 2016, Ethiopia committed to restoring 15 million hectares of degraded landscapes as part of the African Forest Landscape Restoration Initiative (AFR100). While various approaches such as Participatory Forest Management (PFM), area enclosures, Sustainable Land Management (SLM), REDD+, and soil and water conservation are expected to help the country achieve its targets, tree planting has been the primary focus.

ⁱ Regreening Africa is an ambitious five and a half year (2017-2023) programme supported by the European Union. Implemented by World Agroforestry (ICRAF) and a consortium of organisations including World Vision, Catholic Relief Services, Oxfam, Care and Sahel Eco, the programme aims to reverse land degradation among 500,000 households across 1 million hectares in eight Sub-Saharan African countries. By integrating trees into croplands, communal lands, and pastoral areas, Regreening Africa seeks to improve smallholder livelihoods, food security and resilience to climate change. The programme leverages science and research to measure impact, enhance social inclusion and livelihood efforts, and creates a sustainable enabling policy environment for land restoration at national and sub-national levels.

ⁱⁱ Farmer Managed Natural Regeneration (FMNR) involves the selective pruning and management of naturally regenerating trees and shrubs from stumps, roots, and seeds in the soil to restore land at low cost. Land managers can select the trees and shrubs they wish to remain on their land during field preparation and prune the shoots and protect them to allow them to grow.



Large-scale tree planting campaigns have gained momentum throughout the country's successive Growth and Transformation Plans (GTP). For example, the GTP II aimed to restore 5 million hectares of degraded land through afforestation/reforestation to increase the national forest cover by 4.5% by 2020 (Kassa et al., 2022). Moreover, it planned to plant 20 billion tree seedlings. In practice, the GTP II could not reach its targets but was able to bring under restoration 2.6 million hectares and planted 15 billion seedlings (Environment Forest and Climate Change Commission (EFCCC)³ 2020).

Despite the enthusiasm for large-scale tree planting campaigns, challenges remain in terms of ecological considerations (i.e., what species to plant, where, how, and for what purpose), social and economic objectives, and post-planting care strategies (Environment Forest and Climate Change Commission (EFCCC) 2020). An evaluation of Forest and Landscape Restoration initiatives has shown mixed results, particularly in managing landscapes for multiple benefits, ensuring effective community participation, establishing ownership and use rights, adapting approaches to local context, and adaptive management to ensure long-term resilience (Kassa et al., 2017). PFM initiatives have also not significantly impacted communities' livelihoods (Tesfaye et al., 2011).

While tree planting has been the main approach to land restoration, alternative methods such as FMNR offer potential solutions to address the existing challenges. FMNR provides direct benefits to local communities, including access to firewood, animal fodder, improved soil fertility, and increased crop productivity (Niguse et al. 2019). Although Assisted Natural Regeneration (ANR⁴) has been practised in the country, FMNR and ANR have not been fully integrated into federal and state policies and practices related to land restoration campaigns, which have predominantly focused on tree planting (Hagazi et al., 2019). However, through the Regreening Africa project, with the support of its implementing partners Catholic Relief Services (CRS) and World Vision, and technical support from ICRAF, government actors and services have been successfully influenced to systematically integrate FMNR into official land restoration processes. As part of the integration process, FMNR has been incorporated into the National Drylands Restoration Strategy (Ministry of Agriculture and PENHA, 2022) and its cascading to various regional states. Other related processes involve the establishment of quality seedling producer groups, energy efficient cool stove producers, provision of grafted materials, site-specific agroforestry interventions, and the utilisation of FMNR benefits such as beekeeping and grass harvesting (Getahun, 2023; World Agroforestry, 2023).

³ The name of the organization has changed to Ethiopian Forest Development (EDP)

⁴ Assisted Natural Regeneration (ANR) is used interchangeably with FMNR in the Sahel. In some countries it refers to regeneration and management in communal or areas not used for farming



Description of the outcome process

Following advocacy efforts by the Regreening Africa project, FMNR gained greater priority among key ministries and partners. Government officials at the national and district level adopted FMNR concepts, approaches, and implementation strategies in their formal land restoration interventions. FMNR has been widely practised at the grassroots level due to its low-cost and easily applicable nature, making it an effective system for regenerating degraded croplands and grazing lands. FMNR provides environmental, economic, and social benefits to the community.

This policy and practice shift was made possible through a strong collaboration with government officials, awareness-raising efforts, and capacity building on FMNR which helped increase FMNR adoption and create a sense of ownership. Workshops, quarterly meetings organised with the district government representatives, biannual joint review and monitoring visits, Joint Reflection and Learning Missions, sustainability planning with multi-level stakeholders, and programme close-out and handover ceremonies at the district level facilitated the advocacy process.

Establishing exclosures as a method of restoring degraded landscapes has been widely practised in Ethiopia including the Regreening Africa programme sites (Birhane et al., 2017). Initially, farming communities collect grass through cut-and-carry systems (Hagazi et al., 2020), but over time, vegetation cover increases and grass biomass decreases. Consistent application of FMNR practices from the early stages of exclosures enhances tree growth while sustaining grass harvest and providing additional benefits such as firewood from trees thinning and pruning practices.

The mainstreaming of FMNR by the Regreening Africa programme has brought about an attitudinal change in various locations, leading to improved management and utilisation of exclosures and other farmlands. Comprehensive capacity building efforts and the establishment of demonstration plots have accelerated the adoption of FMNR in the Tigray region (Hagazi et al., 2020). For example, more than two million trees of *Faidherbia albida* have naturally regenerated in a few years, mainly in the farm and grazing lands of Atsbeha.



Significance of the outcome

The formal adoption of FMNR in national and district level land restoration interventions represents a significant change in mindset and behaviour, shifting from a focus on massive tree planting campaigns to a more diversified approach that encourages greater participation, control, and autonomy for farmers. Agroforestry, particularly FMNR, can be tailored to the local context, respects ecological characteristics, and promotes sustainable value chains that improve livelihoods. FMNR is also accessible due its low labour and investment requirements and inclusive as it can be practised by all household members, regardless of age or gender.

This policy and practice change has sparked new dynamics, both at the national and local levels, in favour of FMNR. There has been an increase in the conception and implementation of FMNR projects. World Vision Ethiopia has initiated a National Alliance that has brought together a core group of like-minded actors from the government and civil society. They have set an ambitious goal of scaling FMNR across 70,000 hectares. This initiative promotes FMNR while integrating various context-appropriate multi-stakeholder scaling interventions, aiming to catalyse a national regreening movement from both top-down and bottom-up approaches. Additionally, CRS has also incorporated FMNR as a restoration practice within the USAID-funded Resilience Food Security Activity (RFSa) project.

The district government experts, development agents, and officials are now providing independent training on FMNR and working to manage free grazing by sensitising the community and strengthening village bylaws. They are taking the lead in implementing the sustainability plan following the closure of Phase 1 of the Regreening Africa project. The district government has planned to expand FMNR sites in two new local areas (kebeles) independently and has integrated FMNR and exclosure management practices into their district government plan. The district government experts, development agents, and officials have witnessed the positive impacts of FMNR in mitigating the effects of climate change and are committed to sustaining the practice beyond the project's completion. During monitoring visits and the programme closeout ceremony, Dodota woreda experts such as Keli Edo and Adem Hussein, reflected on the benefits and changes they observed in their district as a result of FMNR adoption. They also indicated that FMNR is incorporated into the annual government plan for scaling in the remaining kebeles in Dodota. They emphasised the improvement in the microclimate of their village compared to neighbouring kebeles due to FMNR.

The importance of this policy improvement lies in the government's recognition of FMNR as a land restoration practice and its potential for achieving the country's ambitious national and international commitments. This recognition will contribute to diversifying land restoration practices, which were primarily centred around tree planting.





Contribution of Regreening Africa

The Regreening Africa programme played a significant role in achieving this outcome through financial and technical support. The programme facilitated various activities, success stories, and experiences through ground activities, stakeholder engagement workshops, Joint Reflection and Learning Missions (JRLMs), and other events. Capacity building on FMNR at local level, including training of government experts, development agents, and Village Forest Technicians (VFTs), as well as the establishment of FMNR groups, also contributed to the outcome. Lessons and success of FMNR were effectively communicated to stakeholders at national and regional levels through platforms such as JRLMs, joint monitoring visits, experience sharing visits, and the preparation of manuals and brochures in local languages.



Next steps

- ✓ The next steps involve the district government's continued leadership in implementing the sustainability plan in collaboration with local communities. Government experts, development agents and officials will persist in their activities of capacity building for farmers on agroforestry, particularly FMNR.

Suggested citation

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