

Accelerating land restoration by building on farmers' experiences *Lessons from African drylands*

Land restoration improves local livelihoods, reduces poverty, allows communities adapt to climate change, and sequesters carbon in trees and soil. Trees are central to most restoration efforts, yet large-scale plantations are criticized for their negative environmental and social impacts. However, in some countries a growing number of farmers are encouraging trees and shrubs to regrow on their farmland, and this is leading to widespread greening, ... a practice called farmer managed natural regeneration (FMNR).

Wageningen University and Research, World Vision and Tropenbos International joined hands to share stories, experiences and opportunities for dryland restoration on 11 October 2022, with more than 100 people gathered in Wageningen and 100 more following online. They listened and asked questions to leading experts on farmer managed natural regeneration. Special guest was Tony Rinaudo, chief climate action advisor at World Vision Australia, and winner of the Right Livelihood Prize (2018).



Professor of tropical forest ecology Frans Bongers opened the symposium with a news article [Phantom Forests: Why Ambitious Tree Planting Projects Are Failing](#) showing how and why large tree planting campaigns fail, and brings forward assisted natural regeneration, including FMNR, as an alternative to tree planting with significant benefits.

Tony Rinaudo, , then introduced a short version of The Forest Maker, a new film produced by Oscar-winning filmmaker Volker Schlöndorff. It told the inspiring story of his role in pioneering the early spread of FMNR in Niger since the 1980s, and that later spread to more than 5 million hectares – land now restored and greened, and yielding larger harvests for 2.5 million people. Chris Reij, a leading voice on greening Africa's drylands, built on this by explaining that satellite data and field research show large-scale greening by farmers not only in Niger, but for instance also in Mali, Tchad, Ethiopia and Malawi. In the latter country one finds FMNR on 3.2 million hectares. This large-scale greening in Malawi has flown under the radar and was uncovered in 2019. Madelon Lohbeck from Wageningen University presented the science behind FMNR, and that there is a great need to unravel the mechanisms underlying natural regeneration to be able to know where it is most effective and where it may need to be complemented with tree planting. Though she also noted that "even though further research is needed, this should not stop its implementation right now."

Panel

A panel of the speakers plus Nick Pasiecznik of Tropenbos International, then took questions from the audience, chaired by André Brassier. These include questions from Acorn (Rabobank), VU Amsterdam, the Dutch Ministry of Foreign Affairs and a number of NGO's (e.g. CARE, Justdiggitt, Woord en Daad, CARE...) and other experts, all active in areas related to restoration. The need to better communicate the positive benefits and potential of FMNR at all levels was repeatedly raised. The question 'What role can carbon credits play in restoring drylands?' led to interesting exchanges; restoration increases carbon stocks, but the panel was combined in their concern regarding carbon markets. And that we must broaden our focus on FMNR to include all assisted natural regeneration, on pastures with exclosures, and also the need to manage the tens of millions of hectares of weedy invasions across African drylands. Other issues raised were the need for more coherence and closer collaboration between implementing organizations and donors, and that we must acknowledge the benefits beyond greening and carbon..... increased biodiversity, soil fertility and yield of all kinds of tree based products.



The most important learnings from the symposium:

FMNR presents a much-needed story of hope in times of interlinked environmental crises was clearly sensed by the positive atmosphere during the symposium. This took us on a journey... of how FMNR developed since the mid-1980s to the present day where it covers tens of millions of hectares worldwide. The symposium showed what makes FMNR a success and how it can be a model for accelerating restoration during the UN Decade on Ecosystem Restoration.

FMNR – led by farmers, for farmers and their communities

- FMNR is an example of farmer- and community-led restoration, based on traditional knowledge and management. Farmer autonomy is both a requirement and an outcome, and which allowed it to grow into a social movement that spread the technique through farmer-to-farmer learning. And this is seen to be more sustainable than top-down initiatives that have proven costly, and often suffered from low tree seedling survival from lack of maintenance and follow-up.

FMNR – it works and must be better communicated

- Assisted natural regeneration has proved very successful and low cost compared to large tree planting schemes. Restored land increases soil fertility, groundwater recharge, biodiversity and crop yields, leading to better food, fodder and fuel security and diversified incomes even in drought years.
- Encouraging natural regeneration is low cost and can quickly regreen large areas, but farmers have specific wishes that may not be met only by species that regrow in their fields, or may not regrow, so tree planting can be a valuable complement.

FMNR –successes need scaling up... now!

- Locally – Communities must realize tangible benefits from restored land. Private sector investment shows promise but is currently limited in scale. Producer organizations can help, if supported by incentives to promote economically and ecologically viable local enterprises.
- Nationally – Organizations, institutions and governments require the resources and capacities to facilitate discussions between all involved, and develop and enforce land-use plans and bylaws governing fair use of natural resources. Women, youth and marginalized groups must be better represented and see equitable benefits.
- Internationally – Restored areas, farmers' fields, pastoral and invaded land, must be included in restoration commitments, and towards the Paris Agreement by better quantifying the accumulation of plant and soil carbon. Efforts should encourage institutional and regulatory reforms that support locally-led restoration initiatives.

The symposium closed, with many messages of thanks received from participants for this further sharing of 'the good news' of FMNR success. It highlighted the potential for contributing significantly to meeting ever increasing restoration, climate, biodiversity and other development goals, and pressing for the need for resources to promote more widespread adoption.

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Pictures: Farmer in Senegal (R. Winterbottom); FMNR in Niger (C. Reij)