

Trees to revive farmland in Burkina Faso

TerresEauVie, Burkina Faso

In Burkina Faso, a landlocked country in West Africa, desertification is on the rise. More than 9 million hectares of agricultural land, representing one third of the country¹, are degraded, with an additional 360,000 hectares degrading every year² fueled largely by climate change. Rains are rare and when they occur, they wash away the soil exposed to erosion without vegetation cover (pickup of almost all leftover crop residues that previously protected the soil from sun and wind damage, excessive clearing to increase the area under cultivation, mining, etc.). The consequences of land degradation are extremely serious in Burkina Faso where more than 80% of the population's livelihood depends on agriculture and livestock. Land productivity declines. Rural communities have poorer and poorer harvests. Food insecurity and malnutrition are increases. To counter desertification, Burkina Faso has committed to restoring 5 million hectares of degraded land by 2030³, in line with the Great Green Wall⁴ initiative from Senegal in the West to Djibouti in the East of Africa. But this cannot be done if the population does not know that they can act and how they can help restore the land.

To participate in this much-needed effort, the USAID TerresEauVie Activity, under the RISE II Initiative, promoted a technique known as Farmer-Managed Natural Generation (FMNR). It is an inexpensive, simple and sustainable practice that communities can use to restore their land, increase productivity and build resilience. It consists of selecting, protecting and helping to grow trees and shrubs that grow naturally on a field. Trees help fight against erosion, protect from the wind and nourish the soil. Over the seasons, the land of farmers who practice FMNR regenerates, revives, and becomes fertile again.



Moustapha Ouedraogo, a relay producer in the municipality of Barsalogo, advises Mariam Ouedraogo, a cowpea and sorghum producer, to better protect the trees on her one-hectare field. Photo: TerresEauVie, January 2021

In the Centre-Nord region, TerresEauVie has trained nearly 160 producers on FMNR techniques in 3 municipalities (Tougouri, Yalgo and Barsalogo), in collaboration with the representative of the Ministry of Agriculture. These producers then shared what they learned with 1,500 people in their home village and did follow-up and advisory visits. These people practiced FMNR on 1,446 hectares. Producers felt valued and integrated into the development of their municipalities.

In Barsalogo, the municipal technical services for the environment and agriculture provided the initial training. Pascal Kabore, the representative of the Ministry of Agriculture in the locality, noted that "the participants of this training were very interested and that their participation was very active. This is because the problem of "zipélés" ["infertile degraded soils" in Moore, the local language] is of concern to producers. Their fields are less and less fertile, yields are falling. Participants had already seen people implementing the FMNR and how this practice had restored their land. But they didn't know how to do it. They wanted to learn about it to get fertile soils again. Without this training, we would not have been able to reach out to such many people. This has clearly brought our agriculture department closer to the communities. Since then, more producers come to us for advice."

¹ Spring: [Ministry of Agriculture and facilities hydro-agricultural and Giz, 2018](#)

²  [World Agroforestry Center Organization of the United Nations \(FAO\)](#)

³ Spring: [UNCCD](#)

⁴ See <https://www.greatgreenwall.org/about-great-green-wall>

Moustapha Ouedraogo was chosen to participate in this initial training because he is an active member of the local water committee that tries to protect water resources and prevent desertification. "This training was very important for us. The situation is difficult for all farmers. I was able to acquire precise knowledge of the techniques and I immediately put them into practice in one of my fields when I returned to my village. I know that the tree prevents rainwater from falling too quickly down on the soil. The soil will have more time to absorb all the water during the rainy season. The tree also provides shade so that less water evaporates from the ground. This is very important for us because our region is hot and dry. Next year, I will extend FMNR practice to my other fields. As relay producer, I was also able to train 40 producers in my village. They were not difficult to convince, and I could show them the different techniques directly on their fields. Then I went back to visit them to provide more advice related to what I was seeing. The more people who practice FMNR, the more the soils will be protected, so our fields will get restored and productive again and we will be able to live better."

Mariam Ouedraogo is one the villagers trained by Moustapha. She grows sorghum and cowpea on her one-hectare field. She testifies: "What I want is for the land in my field to become more fertile again and to give better production, so that I can feed my family better. So, when I had the opportunity to learn more about MFNR thanks to Moustapha, I didn't hesitate to put it into practice on my plot. Moustapha really provided me with all the necessary advice. Actually, FMNR is not that complicated to implement. It just requires willpower and time. I chose about twenty trees that were solid, with good roots. I protected them by removing those who were less promising and cutting them to allow them to grow well. There are thorn trees and fruit trees like jujube trees. I also know how I will select the saplings I will let grow in the field. In addition, the wood that I cut, I keep it for myself, as firewood and for animal shelters

for example. So, no need to look elsewhere. I will continue this practice because I master it. I know it's going to impact the soil progressively and positively over the years and I'm going to grow crops more easily with better yields. And Moustapha will always be there answer my questions. I will advise my relatives and friends to also practice FMNR."

"In fact, Farmer-Managed Natural Regeneration is not that complicated to implement. It just requires willpower and time. [...] I will continue this practice because I master it. I know it's going to impact the soil progressively and positively over the years and I'm going to grow crops more easily with better yields."

Mariam Ouedraogo, Producer of Barsalogo.

What Mariam explains underlines how the 160 people initially trained by TerresEauVie were finally able to encourage nearly 1,500 people to actively practice FMNR, on a voluntary basis. As individuals and communities see the impact on their land, FMNR spreads from person to person, from one community to another. Through the continued practice of FMNR and their own efforts, communities can effectively restore the productivity of degraded lands in about five years and protect water resources. True that you need to be patient to see FMNR effects. "You can't plough, sow, harvest and eat on the same day", says an African proverb. But it has a gradual and lasting impact on soils and in turn on the livelihoods of communities that can be restored (food stock, wood, etc.). This allows farmers to combine the benefits of the soil with their own benefits in the medium and long term.