# Fertile drylands: the merits of Farmer Managed Natural Regeneration

# LAND DEGRADATION IN THE SAHEL

In the drylands of the Sahel, land degradation is one of the biggest threats to the livelihoods of millions of people. In Niger, Burkina Faso, Mali and Senegal, countries which are highly affected by droughts and food insecurity, the loss of productive and fertile land threatens the livelihoods of both farming communities and pastoralists. Unsustainable agricultural practices such as the cultivation of non-indigenous and irrigated crops, as well as overgrazing, are major drivers of land degradation. This process is exacerbated by climate change, causing even more erratic rainfall patterns, longer periods of drought and unpredictable growing seasons. This situation is typical for most countries that are part of the Sahel, which stretches from Ethiopia to Senegal.

#### TURNING THE TIDE

Luckily, there are promising initiatives to turn the tide. In various countries in the Sahel, vast tracts of land have been restored by the local population by nurturing what spontaneously springs from the soil and protecting the sprouts from cattle and hazards. Central to this *Farmer Managed Natural Regeneration* is the idea to allow nature to do its work and let the dormant but still active 'underground forest' of roots, stumps and seeds sprout spontaneously. Generally speaking, 'just' planting trees as a means to regenerate ecosystems is not feasible in drylands due to a lack of water, human capacity and recurrent spells of drought.

On a community scale, Farmer Managed Natural Regeneration is a powerful means of resilience to climate change, enhancing food security and increasing incomes. Moreover, it comes from and is done by farmers themselves, involving other stakeholders such as nomadic cattle herders as well. This makes it truly a community-based initiative.



# WHAT IS 'FARMER MANAGED NATURAL REGENERATION'

FMNR is a generic term for a variety of 'farmer led regreening initiatives'. FMNR is always community based, low-cost and low-technology, and enhances local food security and ecological stability in the long run. The key are farmers and their conviction of the importance of having trees on their farmlands. The ownership lies with local people through the establishment of Village Committees, which form the backbone of Farmer Managed Natural Regeneration and which monitor the implementation. An important factor for success is an agreement between village farmers and other land users like cattle herders and nomadic populations on land use and the protection of seedlings from 'cattle & axe', especially during the first period of 3 to 4 years. The reward is a growing resource cake for all: pastoralists gain access to more biomass (fodder), while the farmers gain access to the herds' manure (droppings left behind).



Baobab fruit, Senegal

#### WHO BENEFITS?

Small-scale subsistence farmers (male and female) are the key actors of FMNR and hence also directly benefit. This group develops the skills to regreen their land through Farmer Managed Natural Regeneration, and at the same time increase food production. (Nomadic) cattleherders and livestock farmers are omnipresent in the dryland areas of Niger, Burkina Faso, Mali and Senegal and clearly benefit in the long run as well. In these Sahel countries, women play a vital role in farming food crops, animal husbandry, harvesting and production of non-timber forest products, processing and provision of basic needs such as water and firewood for their families. Obviously, women should be involved in the implementation of FMNR, and get their equal share of decision-makingand negotiation power. And lastly, young people are more and more involved in FMNR-initiatives, as it can be a solid alternative to migrating to towns, and cities in search for work and income.

#### HOW DOES IT WORK?

#### Awareness-raising

Because the adoption by farmers of the Regreening approach requires quite an investment in terms of time before one can see and enjoy the results, organising awareness-raising meetings in the villages is crucial. Moreover, the use of local radios for the dissemination of information on FMNR is crucial for upscaling.

# Capacity strengthening

One of the key activities of local organisations working on FMNR, is capacity-strengthening, such as training farmers on FMNR techniques and exchange visits between farmers.

## Market development

Farmers (and other stakeholders) not only need support on the production side, but also on the market side. After all, market demand and a good price are the biggest drivers for farmers to grow a certain crop.

### Research

As it's very important to show scientific evidence of success to policy makers, donors and farmers, a lot of research (collecting data at village level and at regional scale, measuring the programme's impact: soils, hydrology, biodiversity, socio-economic conditions, etcetera) is done by local research institutes.

# Lobby and advocacy

To make sure FMNR initiatives will flourish, certain basic conditions must be in place. Lobby & advocacy efforts are focused on making FMNR become part of Community Development Plans, on adjusting legislation for land tenure, forest management and communal land for cattle grazing. We bring contradictory legislations to the surface and bring these to the attention of duty-bearers.

#### WHAT MAKES FMNR UNIQUE?

- As FMNR is a long-term process, it needs **long-term commitment and financing**.
- The FMNR-method stems from communities in the Sahel itself and is not a top-down blueprint. This programme merely facilitates its diffusion to other communities that might benefit from it, making it very demand driven, tailor made and **community-based**.

- In various countries in the Sahel, regreening initiatives have already started long ago or more recently. It is very important to link these initiatives with each other in order to share information, best practices and ways to scale-up. This way local, national and international organisations and institutions can connect to form a strong movement that could really change and regreen the Sahel region.
- As many stakeholders are involved, FMNR is widely accepted and supported, which makes the results **future proof**.
- This **integrated approach on basis of three processes** (implementation by farmers, solid legal framework and market access) targeting all key actors seeks to create the most optimal situation to roll out Farmer Managed Natural Regeneration on a large scale.



FMNR tomatoes in Burkina Faso

# FOR MORE INFORMATION PLEASE SEE:

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