



MEV-CAM GOOD PRACTICES:
ENGAGE, LEARN, INSPIRE



FARMER MANAGED NATURAL REGENERATION IN UGANDA



BACKGROUND

Farmer Managed Natural Regeneration (FMNR) was implemented in the Karamoja region of Uganda, as part of the Global Environment Facility's Fostering Sustainability and Resilience for Food Security in Karamoja sub-region project, implemented by FAO and the United Nations Environment Programme. This area is one of the driest parts of the country, suffering from very low rainfall and agricultural productivity. Deforestation is common, leading to land degradation, and there is a high dependence on unsustainable practices such as charcoal production.

The main objective of FMNR is to add trees to existing croplands or rangeland by training farmers to facilitate the growth of important indigenous tree species. It involves regenerating trees from felled stumps (regrowth) or from wildings (seeds that fall and germinate on their own). The practice increases vegetative cover and biodiversity, and restores and protects the environment all whilst integrating of trees with other economic activities including crop farming and livestock rearing.

MEV-CAM'S GOOD PRACTICES AT A GLANCE

This good practice was extracted by the Food and Agriculture Organisation's Making Every Voice Count for Adaptive Management (MEV-CAM) initiative, working alongside communities participating in GEF-6's Resilient Food Systems projects to be upscaled throughout GEF-7's Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes interventions. This document aims to show the impact of good practices on local communities, from their own perspective. MEV-CAM is now working to share this insight through the South – South Cooperation Knowledge Gateway, a platform designed to link the local knowledge held in these good practices with technical guidance.

“It has been two years since I started pruning and slashing my site and I have already seen a difference in the tree growth rates. When I prune, I allow the small branches and leaves to rot on the ground which increases humus in the soil and enables seedlings to grow faster.”

Alfred Omara, beneficiary from Karamoja sub-region in Uganda

FIVE SIMPLE STEPS TO IMPLEMENTATION

1 Survey the farm, noting how many and what species of trees are present. Generate a preferred species list based on individual and community goals.

2 Select stumps, roots or naturally growing tree seedlings that will be used for regeneration. On cropland, there must be a distance of 10-15 metres between stumps or tree seedlings to avoid shading of crops.

3 Out of 10-15 stems that may sprout from the stems, select the healthiest, tallest, and straightest that will grow into trees.

4 About five stems per stump can be selected. Remove all unwanted stems and side branches. This allows the remaining shoots to grow faster due to reduced competition for light, nutrients, and moisture.

5 Return regularly to prune any excess stems and side branches for best results.

WHAT HAS THIS PRACTICE ACHIEVED?



500 000 tree seedlings have been regenerated to enrich rangelands and croplands.



Over 200 hectares of forests in the region are now under integrated natural resource management, including farmer managed natural regeneration.

WHY SHOULD THIS PRACTICE BE UPSCALED?

Sustainability

FMNR is both environmentally and economically sustainable in the long term:

- It is not costly and uses readily available materials - it capitalises on existing tree stumps and wildings on farmlands to regenerate trees and shrubs. This option is more cost effective, and trees grow much faster than planted seedlings because existing stumps of indigenous trees already possess an extensive well-developed root system to facilitate growth.
- Farmers need to be trained to identify the tree species that are compatible with the local farming systems, how to care for them as well as sustainable harvesting. Once they are trained, they can continue this activity on their own in the future.
- When farmers begin to reap the benefits, the practice will be implemented in the long-term. Crop and livestock yields can increase due to improved soil fertility. The additional trees mean there is wider availability of fodder for livestock, raw materials for crafts, construction, medicines, and other non-wood forest products which have economic value.

Gender

FMNR promotes ecosystem restoration by addressing socio-economic objectives, especially those related to gender inclusion. Traditionally, land cultivation and firewood collection is carried out by women and girls.

FMNR improves their lives by:

- Growing trees that provide shelter from the hot sun while working in the crop fields.
- Providing a closer source of food, livestock fodder, firewood and medicine, decreasing the time and effort needed to carrying out these tasks.

Restoration

Restoration projects at all scales contribute to the UN Decade of Ecosystem Restoration. FMNR contributes to ecosystem restoration by:

- Improving and restoring vegetative cover in dry areas, reducing soil erosion and in the medium term increased household food security and incomes.
- Facilitating the growth and restoration of many indigenous tree species, including desert dates (*Balanites aegyptiaca*), tamarind (*Tamarindus indica*), several types of acacia trees and *Combretum spp*, among others. Farmers generally support regeneration of trees with medicinal value and those that provide fruits, vegetables and fodder for animals.

TIPS FOR REPLICATING THIS PRACTICE

- Availability of willing and interested farmers to take up farmer managed natural regeneration.
- Grouping of farmers and their consequent training in farmer managed natural regeneration.
- It is useful to incentivise local farmers to take part through the provision of wheel barrows, panga knives and polythene tubes for seedlings.

INTERESTED IN LEARNING MORE?

- FAO: [South-South Cooperation Gateway](#)
- FAO Technologies and Practices for Small Agricultural Producers (TECA) platform: [Farmer Managed Natural Regeneration](#)
- World Agroforestry: [Farmer Managed Natural Regeneration in Kenya - a guide](#)
- [Assisted Natural Regeneration Alliance](#)
- [Uganda | Resilient Food Systems](#)



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