# english black

# Package 88, Script 7

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**Farmers in Niger benefit from letting trees grow in their fields**

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### **Notes to broadcaster**

In the 1970s and 80s, much was written on the energy crisis in Sahelian countries and in other arid and semi-arid areas. There appeared to be a large gap between the population’s energy needs – almost exclusively provided by wood – and the capacity of trees and shrubs to meet that need. At this time, the Sahel had been struck by successive years of drought. Agricultural land extended further and further into marginal zones, whose vegetation was destroyed.

It appeared that the vegetation near cities in the Sahel was going to be completely destroyed due to the rapidly growing population’s need for fuel wood.

Currently, it is thought that vegetation in the Sahel is declining from overuse by the population. While this is obviously happening in some parts of the Sahel, there are many areas which are experiencing an increase in woody vegetation. For example, in Niger, increases in woody vegetation are taking place in the Tahoua, Maradi and Zinder regions. In Tahoua, tree planting has been organized by projects focusing on the rehabilitation of barren lands, while farmers also began protecting trees and shrubs which have grown back naturally. At the same time, livestock farmers are protecting natural vegetation such as the tree species, *Acacia raddiana.* In Maradi, NGOs helped farmers to protect and manage trees and shrubs which regenerated spontaneously on their farms. This process began in the mid 1980s. More recently, a project in the Aguié district supports the creation of village organizations to protect, manage and use on-farm trees. In Zinder, a large-scale farmer accomplished natural regeneration.

This script discusses Farmer Managed Natural Regeneration (FMNR). FMNR is a practice undertaken by farmers which consists of protecting and managing re-growth of trees and shrubs in fields. FMNR benefits farmers by bringing back woody vegetation. Farmers almost always concentrate on bringing back trees and shrubs with an economic value.

It is surprising to learn that farmer-managed and protected natural regeneration in crop fields has received little attention. Very few national and international decision-makers are aware of it, and there are only a few publications on the topic. But one study states that Farmer Managed Natural Regeneration has had a positive impact on at least five million hectares of cultivated land in Niger. If this is accurate, it is unique in the Sahel and probably in Africa as a whole.

This script is based on actual interviews. You could use this script as inspiration to research and write a script on a similar topic in your area. Or you might choose to produce this script on your station, using voice actors to represent the speakers. If so, please make sure to tell your audience at the beginning of the program that the voices are those of actors, not the original people involved in the interviews.

**Host:** Welcome, listeners. Today we are going to talk about a farming practice called Farmer Managed Natural Regeneration or FMNR, which is practiced by many farmers in southern Niger. In FMNR, farmers protect and actively manage the regrowth of certain types of trees in their fields in order to bring back vegetation to an arid area and improve their crop yields and their income. The species they use are almost always those with economic value – in other words, those that produce fruit or firewood and other goods. The practice is called FMNR to distinguish it from tree planting and from the management of natural stands of trees. This program talks about the reasons that farmers in the Maradi region of southern Niger began to protect the natural regrowth of trees and shrubs in their fields, how they manage these trees and shrubs, and the impacts of FMNR on their daily lives.

FMNR in the Maradi region of southern Niger began with the work done by the NGO Serving-In-Mission or SIM in the 1980s through the Maradi Development Project. Following that, there was a project funded by IFAD in the Aguié district which concentrated on FMNR. In 1999, 88% of people surveyed in project villages and in villages beyond the scope of the project practiced FMNR to some extent in their fields. The result was that approximately one and a quarter million additional trees were added to the project zone every year.

I interviewed Mr. Ali Micko, who has been involved with the project in the Aguié district of the Maradi region.

Hello, Mr. Micko. My name is Lawali Mamane Nassourou from the NGO *Le Micro Vert*. Our interview today will focus on FMNR. Can you start by introducing yourself?

**Ali:** My name is Ali Micko, and I am a farmer and President of a group of villagers in Dan Saga.

**Host:** When did you start to notice the degeneration of vegetation in your fields?

**Ali:** The vegetation began to decline in the 1960s, and it reached its climax in the 1970s. The deterioration was mainly caused by destroying all the trees and by abandoning the practice of leaving the land fallow.

**Host:** What caused you to change your farming practices?

**Ali:** The situation became challenging for all farmers. Land had become unfarmable, sand covered our crops, and fuel wood or multi-purpose trees were rare. We changed our farming practices to leave young trees in the fields. This idea was supported by a project organized by CARE International.

**Host:** How did you change your farming practices?

**Ali:** At some point in time, everyone realized the importance of leaving young trees or saplings in the fields. Farmers began to adopt these improved clearing practices with the support of the project. We also cared for young shoots and the young plants that regrow on the roots of older trees. Besides this, we created a nursery with local tree species such as *Hyphaene thebaica, Acacia albida, and Parkia biglobosa (Editor’s note: see local names at the end of the script)*. We also started using tree litter – dead leaves, bark and branches that have fallen to the ground – as mulch.

**Host:** When did you see that these efforts were having a positive impact on the vegetation in your fields?

**Ali:** Our efforts go back 25 years, but they were adopted on a wider scale about 18 years ago.

**Host:** What have the impacts been on your crops?

**Ali:** At the time when vegetation was completely destroyed, millet yield per hectare was only 90-120 kilograms or about 13-17 bunches. But now, with increased vegetation, we can get 315 to 455 kilograms per hectare. If we use a mineral fertilizer, yields can reach 700 kilograms per hectare.

**Host:** How has Farmer Managed Natural Regeneration affected your income?

**Ali:** Agriculture is now profitable. Trees provide fodder for animals, wood for sale, for fuel and for building. During the food crisis from 1999-2000, most households here were able to survive, thanks to the sale of wood.

**Host:** What have the impacts been on the work done by women?

**Ali:** With increased vegetation, men cut wood in their fields and carry it to their homes using carts bought with the income from farming, forestry and raising animals. So women have much less work finding, cutting and carrying wood. Also, part of the income from the sale of wood is used to buy water and grind grains. Previously, women would have done this work.

**Host:** How do you manage this new wealth?

**Ali:** Since the beginning of this new approach, we have had a supervisory committee of both men and women. The committee is in charge of monitoring the efforts made by farmers and reporting to village chiefs when people violate community rules on how to treat the fields. When the trees grew taller, we formed a management committee, which brought together a few villages in the Dan Saga area. With support from IFAD and the government environmental services, the committee opened a rural market for wood, managed by the community. Income from this market is divided into shares that are invested in FMNR, the community, government environmental services and the committee. The market is supported by wood purchased from villagers who sell the trees in their fields.

**Host:** Thank you, Ali, for doing this interview, and for sharing your experiences with us.

**Ali:** We thank you for coming here and showing an interest in our way of life.

**Acknowledgements**

Contributed by: Sanoussi Mayana, Prèsident de lONG RDD Le Micro Vert, a Farm Radio International broadcasting partner.

Reviewed by: Chris Reij, Center for International Cooperation, VU University, Amsterdam.

Common names for tree species mentioned in the script

***Acacia raddiana,*** also known as ***Acacia tortilis*:**

Arabic: talh, sayal, hares

English: umbrella thorn

Fula: chilluki

Kanuri: kindil

Kouka: garatt

Mauritania: tamat

Swahili: munga

Toucouleu: bakan tchili,

Wolof: sandandour

***Hyphaene thebaica:***

Amharic: zembaba

Arabic: dom

English: gingerbread tree. doum palm

Swahili: mkoma

Tigrigna: arkobkobai, kambash

***Acacia albida*,** also known as ***Faidherbia albida*:**

Afrikaans: anaboom

Amharic: grar

Arabic: afrar, harac, haraz

Bambara: casala

English: winter thorn, apple ring thorn tree, apple ring acacia, ana tree, white thorn,

French: arbre blanc, kad

Ndebele: npumbu

Portuguese: espinheiro-de-angola, espinneiro

Sepedi: mogabo

Setswana: mokosho

Shona: mutsangu

Swahili: mgunga, mkababu

Tigrigna: aqba, garsha, momona

Venda: muhoto

Wolof: cad

Zulu: umHlalankwazi

***Parkia biglobosa:***

Bambara: nere

Diola: enokay

English: African locust bean tree, nitta nut, monkey cutlass tree

French: arbre à farine, mimosa pourpre, néré, néré (Senegal)

Gourmantché: budugu

Hausa: dadawa, dawa dawa

Kanuri: runo

Mandinka: nér, nété, netto
Swahili: mkunde, mnienze

Mooré: duaga or ruaga

Portuguese: farroba

Wolof: houlle

**Information sources**

Mr. Ali Miko, president of la grappe de Dan Saga, Department of Aguié, Maradi Region, Republic of Niger.

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