

"The leaves of the *Miyan Gouro Gountayé* seed are used in the preparation of Dambou, a culinary specialty similar to couscous. My family members love it when I prepare this dish, which is a source of satisfaction for me as a woman." **Rakia Moussa, a 24-year-old married woman and mother of one child.** 

### The success story

Okra (Abelmoschus esculentus) is a tropical and subtropical plant of the Malvaceae or mallow family, widely cultivated in Africa<sup>1</sup>. Two species are mainly cultivated in West Africa - these are Abelmoschus esculentus and Abelmoschus caillei, known as okra in French<sup>2</sup>. Okra plays an important role in nutritional security and is also a good source of iodine, which helps to prevent goitre in areas where drinking water is iodine deficient<sup>3</sup>. Throughout its agricultural cycle, okra is subject to many attacks by pathogens such as mildew, verticillium, fusarium, Pithium and rhizoctonia. Insect pests (locusts, cutworms, wireworms, whitefly, leaf miner and aphids) also cause damage to the crop and this happens at all stages of its development by attacking one or more parts of the plant whether it is the stem, the leaves or the fruits4.

The *Miyan Gouro Gountayé* okra seed is the local variety most appreciated by the people in the rural

commune of Matankari. It is exclusively cultivated by women, who unanimously prefer it to so-called improved<sup>5</sup> seeds. The farmer seed system is one of the options for agro-ecological intensification to cope with climate change, the continuous decline of soil fertility and uncertainties due to pest pressure. Farmer managed seed systems are also the basis for farmer autonomy, seed sovereignty and food and nutritional security. Given this context, the efforts of farmers in Matankari to conserve and protect *Miyan Gouro Gountayé* okra seed are supported by SwissAid ,within the framework of the promotion of agroecology.

This case study sought to document the qualities of preferred farmers' seed varieties in Matankari as the benefits of farmers' varieties and the farmer managed seed systems that continue to protect, adapt and utilise them, remain chronically underresearched.

<sup>1</sup> Fohouo, T., & Tamesse, J. L. (2020). Diversity of floricultural insects of Abelmoschus esculentus (Malvaceae) and their impact on fruit and grain yields in Maroua-Cameroon. 2 Laameche, S., & Benaichaoui, B. (2021). Cytogenetic study of six cultivars of Abelmoschus esculentus (okra) and one cultivar of Corchorus olitorius (vegetable cortea) (Doctoral dissertation, Universite Ahmed Draia-Adrar).

<sup>3</sup> Agbessi-Dos Santos, H., & Damon, M. (1987). Handbook of African nutrition: Applied basics (Vol. 1). KARTHALA Editions.

 $<sup>4\,</sup>El\,Hociene, M.\,Study\,of\,Oxycarenus\,hyalinipennis\,pest\,of\,okra\,(Systemic,\,Ecology\,and\,control\,methods).$ 

<sup>5</sup> Improved varieties are bred for industrial agricultural systems. They have reduced genetic base compared with the high variability present in the genetic materials farmed traditionally.

This leads to uninformed policy and development decisions that may undermine such systems in favour of improved varieties and whole-sale adoption of formal seed systems. The findings highlighted the resistance of this seed to pest pressure, drought and the effects of climate change. Moreover, this study recognised that women hold valuable knowledge regarding seed management, cultivation and preparation of *Miyan Gouro Gountayé* and pass it on to younger generations.



Picture 1: Miyan Gouro Gountayé Okra leaves

# The many virtues of local okra according to farmers' experience

The conservation of *Miyan Gouro Gountayé* seed is an ancient practice learned from parents. At the end of the season, fruits of good vigour are harvested and dried, leaving the seeds in their pods. The women explain that in order to have a good seed, it is necessary to cut the pods before drying to allow the seeds to dry quickly and to avoid their rotting. It is also advisable to mix the pods or seeds in ash to repel pests.

Miyan Gouro Gountayé seed is reportedly part of grandmother's tricks to keep her home well. At weddings, mothers put this seed in the young bride's trousseau not only to prepare local dishes, but also to reproduce it. It is also a way of educating young girls about the importance of preserving this seed. Many exotic okra seeds have been popularised in the rural commune of Matankari, but to date most have disappeared over the years. According to the women producers who are members of the farmers' organisation Noma touchin arziki, this variety of okra is very productive



Picture 2: Miyan Gouro Gountayé seeds

compared to the improved variety found in the rural commune of Matankari. Fassouma Abdou, a 45-year-old woman and mother of six children, manages to produce more than 50 kg of okra per season on a plot of 50 m², which corresponds to 10 tonnes per hectare. *Miyan Gouro Gountayé* okra is a short cycle variety - its cycle can last two months with staggered harvests until after the rainy season if it is grown in the rainy season. It continues its production cycle even after the rainy season due to the residual night-time moisture content during October, November and December.

The taste and texture of *Miyan Goro Gountayé* is superior to that of the improved varieties and the sauces that it makes and constitutes a culinary identity in the rural commune of Matankari.

# Valued for its resilience to climate change

For women producers, this seed stands out for its productive potential. In years with low rainfall, it adapts very well to water stress. In wet years, specular yields are obtained even if the rains are sometimes close together. Improved seeds have long leaves and fruits, which are light and smooth in appearance and generally less slimy than the local *Miyan Gouro Gountayé*. These aspects of improved seeds are considered by farmers to be an indicator of low resistance to pest pressure and water stress.

# Women's incomes contribute to food security

Miyan Gouro Gountayé is available and accessible all year round, but more expensive in the dry

season, and its sale generates substantial income for women in Matankari. They sell their seed on the local market, and the supply chain is also observed in the surrounding weekly markets. On the market, the local Miyan Gouro Gountay seed is more expensive than the improved variety. The price per kilogram (kg) of the local Miyan Gouro Gountay seed variety is between 1250 and 1500 FCFA. On the market, the improved seed is

cheaper and costs 1000 FCFA per kg. The income generated by the sale of Miyan Gouro Gountay is a means of empowering women in the Matankari area. For small-scale producers, it is exclusively for self-consumption, but for large-scale producers it helps to meet certain family needs and often replaces the expenses of the head of the household.

## Key lesson

The results of this case study revealed that *Miyan Gouro Gountayé* is important in terms of the decent income it generates for women producers and is superior to improved varieties in terms of productivity and resilience to climate and pest stress. For the women, this farmers' variety represents a culinary identity in the rural commune of Matankari. These are all obvious

signs that women producers need more research involvement to ensure that farmers' perceptions are taken into account. It is up to the State and its partners to capitalise on and preserve these achievements for future generations by emphasising the correlations between traditional varieties, culinary identity and economic aspects.

### CROPS4HD

This document is an output of the CROPS4HD project (<a href="www.crops4hd.org">www.crops4hd.org</a>): a consortium of SWISSAID, FiBL, and AFSA supported by the SDC and LED. CROPS4HD has three major components: production, market and policy advocacy.

AFSA, which is responsible for advocacy, is a broad alliance of civil society actors involved in

the fight for food sovereignty and agroecology in Africa. Its members represent small-scale farmers, pastoralists, hunters/gatherers, indigenous peoples, faith-based organisations and environmentalists from across Africa. It is a network of networks, currently with 37 members operating in 50 African countries.

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#### WHO IS AFSA?

AFSA brings small-scale farmers, pastoralists, fisherfolk, indigenous peoples, faith groups, consumers, youth and activists from across the continent of Africa to create a united and louder voice for food sovereignty.

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