





Global Landscapes Forum



### Holding back the desert

One farmer's story of restoring degraded land in the Sahel region in Burkina Faso

# Background

"I am the eldest of my father's children," says El Hadj Zoromé Alassane, a farmer from the village of Gasselkoli in the Tongomayel district of Soum Province, in the Sahel region of Burkina Faso. "When I was old enough to get my own land, I decided that I wouldn't take a piece of my father's arable farmland, but I would instead grow my millet on degraded, uncultivated [family] land."

Degradation and desertification are serious issues for Burkina Faso. Around 470,000 hectares of land are degraded each year, through a combination of natural and human factors. Trees are felled for firewood, which provides around 80% of the country's domestic energy needs, and to make space for agriculture. As desertification increases, many farmers let their cattle roam freely to enable them to find sufficient food, which retards regeneration further. And, as the climate changes, droughts are becoming more prolonged, and weather more unpredictable. The result? Formerly arable farmlands are transforming into desert, with devastating human and environmental consequences.



Figure 1. Location of land restoration site.

## Taking action

Activists like Zoromé are working hard to turn things in the other direction, boosted by support from civil society and the government, which has committed to restore five million hectares of degraded and deforested land by 2030. In 1993, Zoromé's restoration work was kickstarted when "a white man came here and taught us how to construct stone bunds," he says. These bunds help to reduce the risks of run-off and erosion, and contribute to effective rainwater harvesting. Following the visit, the Forest Service in neighbouring Djibo offered Gasselkoli's villagers a training in planting and tending to trees. "We learned a lot, and we've been putting it into practice ever since," says Zoromé.

Some villagers laughed at him when he began working to recover degraded lands. "But I was convinced that these lands, properly restored, could be more productive than existing farmland," he says. "And I proved it." He's personally restored 10 hectares of "completely degraded" land, and played a major role in mobilizing his village to do the same, resulting in around 200 hectares of total restoration in the area. Now, "95% of household heads here in Gasselkoli adhere to our cause," he says. "I very seldom see a household head who does not construct stone bunds or plant trees." He's also established his own tree nursery, which can house up to 25,000 seedlings.

Since 2003, local NGO Tiipaalga has supported the work in Gasselkoli, along with 24 other villages in Soum province. "They provided us with trainings; they sent trucks to pick up stones to build the bunds; they gave us equipment to construct compost pits," describes Zoromé. Tiipaalga also introduced the concept of exclosure – fencing off a piece of degraded land from any form of use for a certain period of time to allow regeneration – and the organisation provides resources and technical assistance to help farmers put this into practice.

Now, Zoromé is confident in his knowledge of regaining fertility on degraded lands. After building bunds, he digs "zai" holes (planting pits that act as micro-catchments), and adds rich compost. "I do all that well before it starts raining," he says. "With the first rains, any seed inside will grow, and the seedling will be able to resist drought for more than 15 days".



Photo 1. Getting water from the borehole in Gasselkoli village.

### Perspectives on success

Zoromé's brother Issoufou describes the village's transformation: "Land that had been there for 30 to 40 years, and was completely naked and barren, has become a pasture for animals and fields for cultivation." It's even influencing the local climate, says Zoromé: "When the rain clouds gather over our area during the rainy season, it may not rain in surrounding villages, but it will always rain in Gasselkoli, because there are trees everywhere now."

He says the strong social dynamic around restoration that has been created in Gasselkoli is the biggest factor in its success. According to fellow villager Kadissa Kindo, the proven results from Zoromé own hard work were crucial in creating this dynamic. "In the past, we couldn't grow anything here," she explains. "Then we saw that when [Zoromé] practiced zai and built bunds, he had good millet yields. So we began to do it, too."

Serge Zoubga, a forester and program officer for Tiipaalga, adds: "If it weren't for the community's commitment, Zoromé would not have achieved anything significant, despite all of his courage and will. But because he has proven himself socially by assisting villagers in difficult times, he is listened to and followed when he invites people to work for the community interest."

Support from external partners such as Tiipaalga has also been important, says Zoromé. "The road here is terrible, but they keep coming back. If all the projects were fighting against desertification like them, it would already be eradicated from Burkina Faso."

Zoromé's own commitment and generosity have also played a major role in the restoration success. He invests significant amounts of his own resources into the work, spending up to 100,000 CFA francs (around US\$180) a year on buying trees, and hiring people to help him with the restoration activities on his land. He readily offers his knowledge and skills – and free seedlings from his nursery – to other villagers undertaking their own restoration work.

## Challenges

As might seem obvious, lack of water is the main issue for nurturing trees in an area prone to desertification. "No water, no life," says Zoromé. For a long time, there was no borehole in Gasselkoli to access the water in underground reservoirs. "We asked the Government for it, but they didn't help us," he recounts. "So I asked for help from God, and with what I got, I made a borehole. Now, everyone in the village can enjoy it."

Food shortages in the area also pose challenges at times: "Doing restoration work when you are hungry is hard," says Zoromé. So, there is still work to do to build a resilient local food supply. It's also time-consuming to keep grazing animals off the saplings: "Our presence is constantly required on-site to prevent animals from entering it," he says. This is where the support Tiipaalga has provided with fencing has proven particularly useful. **66**<sub>If</sub>

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– Serge Zoubga Forester and program officer for Tiipaalga, Soum Province, Sahel Region, Burkina Faso

# Scaling up?

Word of Gasselkoli's restoration success is spreading. This is welcome news to Zoromé, who strongly believes that widespread effort is needed to halt and reverse desertification.

He is hopeful that partners and actors within the Great Green Wall for the Sahara and Sahel Initiative (GGWSSI) can attract the means to help make this kind of largescale restoration happen.

Zoubga adds that, however big the issue is, "one cannot do without leadership at the village level." He acknowledges that Zoromé represents something of a special case: "There are not many people out there with such strong awareness, who invest so much of their own resources for the restoration cause, and maintain the commitment of their communities toward restoration work." However, there are a number of villagers across the province who, with support, could help grow the work much further, he says. "Our role is to support these local leaders so that they can fully play that role," agrees Adama Doulkom, National Coordinator for GGWSSI. From a governmental perspective, this will include developing stronger tenure and access rights, "so as to reassure these actors regarding their investments [into restoring degraded lands]," he states.

Tiipaalga and the GWSSI are now setting up an intensive training in leadership, restoration techniques and raising awareness for village leaders across the Sahel region. "Our hope is that everyone according to their abilities can initiate something, with the aim of reaching a critical mass in each village of people practicing restoration," says Zougba.

Back in Gassekoli, Zoromé will continue to plant, and to share his knowledge and passion, too. "I'll teach anyone who wants to know how to restore degraded land," he states. "With the results I have achieved here, there is no land that I cannot recover."

Story was developed by Esther Mwangi (CIFOR) and Monica Evans Photos by CIFOR

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