Drought-affected communities restore degraded lands to transform their future

USAID TerresEauVie, Niger

Over the past 20 years, Niger, a semi-arid country in West Africa, has faced multiple severe drought episodes with short- and long-term consequences for its most vulnerable inhabitants. No longer having enough money to live, they must resort to harmful coping strategies such as taking children out of school, reducing their daily meals, or selling animals that normally provided them with meat, eggs, milk and offspring to sell later. In addition to the direct impacts on livelihoods, these recurrent droughts are causing a gradual loss of arable land, which was estimated at more than 900,000 hectares between 2000 and 2013, a loss of 64,600 ha/year on average over this period. This reduces agricultural productivity, increases food insecurity, and can lead to conflict for people competing to use the remaining land.

The 2021 rainy season was particularly erratic with long dry spells at critical period of the cropping cycle. This has inhibited crop and pasture production, leading to significant production losses, up to -40% compared to the five-year average in Niger.

The region of Tillaberi in the south-west of Niger has been especially affected. Since the end of August 2021, it experienced a drought of more than 40 days in a row, even though August falls in the middle of the typical rainy season (from June to October). In more than 80% of the agricultural villages in the region, the drought caused an agricultural deficit of more than 50%, causing a food and nutrition crisis affecting more than one million people through August 2022. To further exacerbate the situation, this region is also experiencing a sharp deterioration in security prompting the Government of Niger to develop an emergency response plan for drought-affected vulnerable populations.

To support Niger’s response, the USAID TerresEauVie Activity developed a partnership with a local NGO called Garkua (which means "shield" in Djerma) to carry out a hybrid action plan that combined both an emergency response (immediate improvement of access to food) and a development solution (re-starting cultivation by sustainably restoring land degraded by climate change) in three Tillabery municipalities (Tondikandia, Imanan and Filingué).

Garkua trained local people in easily applicable land reclamation and water and soil conservation

1 Source : DGEF, 2018 mentionned by « Land Use Cover » Programme of Aghrymet. Regional Center.

2 Source : Sahel and West Africa: Unprecedented food and nutrition insecurity, West Africa Food and Nutrition Security Working Group April 2022
techniques, supporting them in applying these techniques to improve land production capacity and agricultural yields and then paying them for labor provided (known as "cash for work") to facilitate immediate access to food.

In partnership with the agriculture and environment local state services, more than 1,500 people learned these techniques, putting low-cost soil restoration solutions into practice on more than 600 hectares. These techniques included, for example, half-moons (semi-circular basins 2 to 6 m in diameter that are dug on gentle slopes to retain the water, as shown on the picture at the top of the story) and farmer managed natural regeneration (regrowing trees), which not only reverses land degradation but also collects runoff and facilitates water infiltration into the soil to promote better crop growth. They were then able to plant millet, cowpea, and sorghum. In total, these people earned 88.5 million CFA francs (about USD 130,000), at a rate 1,300 FCFA per household per working day. They then harvested what grew through their labor, for personal consumption or to sell.

Next year, these households will be able to use these techniques again, thanks to the shovels and axes that have been provided to them. In the Tillaberi region, there are on average six persons per household, which means 8,700 people in total have benefited from these cash for work activities in the three communes.

In the village of Dirga from Imanan commune, Hannatou Issaka is one of the 200+ people who have benefited from this support. The 43-year-old widow is responsible for her seven children, as well as six of her grandchildren. She testifies about how she was able to better feed her family and look to the future with more confidence through this activity. "I was chosen to carry out the land reclamation work because I am one of the poorest in my village with many dependents. Agriculture is our only source of income. When the harvest is good, we sell some of the cowpea and groundnuts to buy clothes, equipment, to purchase drugs for my daughter who is sick and to put the children in school.

Last year, in my village, because of the drought, we have harvested almost nothing. So, we didn’t have food and we didn’t have money to buy food either. To get by, I had to sell two goats and I had to rely on remittances from first son - who migrated to neighboring Nigeria seeking for money. We are lucky he could help a bit. This year, as we were getting close to the new agricultural season, we were hopeless. The land was depleted, and we had no food to hold on to start field work.

USAID TerresEauVie support came at the right time. In total, I earned 56,000 FCFA for the work accomplished on the field. I could purchase a bag of corn, a 25-kilo bag of rice, and ingredients for the condiments to make the sauce, a bag of rice of 25 kilos. We could hold on for almost two months without needing nor begging for help. I also spared money to buy a little goat. Now I have four goats. Cash for work helped me a lot, because I was able to prevent my other son from going out in exodus to look for money, far from the village. He stayed to help me with the work and the harvest. We stored the harvested crops. Very soon, we will take the straw for animals and take out seeds for next year. With my children, I plan to continue applying the half-moons and FMNR next year on my fields to continue to reclaim the land and harvest more. In my village, some people already applied the techniques learned beyond the plots where we got cash for work. The harvest was good for them."

State technical services monitored the support provided by USAID TerresEauVie with much interest. Lieutenant Ismael Abdou, who is the communal head of the service for environment and the fight against desertification, states: "I think this is a positive action. Participants will enjoy both benefits (income and reclaimed land). This activity alleviated people's suffering at a crucial time, enhancing their immediate economic power and paves the way for brighter future and long-term perspectives for food security. The work was properly carried out. The local NGO Garkua can build on this experience to further contribute to preparedness for droughts in the region."