Innovative, climate-smart farming techniques to ensure a flourishing environment and food security for communities living alongside the Benoue National Park
The Farmer Field Schools (FFS) approach is used to disseminate farming techniques that are compatible with the environment and resilient to climate change. This is a participatory skills-transfer tool that makes it possible for the men and women of the communities living along the Benoue National Park (PNB) to acquire knowledge and skills through learning by doing. Community fields – the FFS model favoured by the project – were used in each of the communities supported. This model takes into consideration the displacement constraints of the beneficiaries as well as the inclusion of the different constituents of the community concerned, i.e. men, women, youths, natives and migrants. All of which would have been difficult if the FFS were located far away from the village.

A total number of 09 Farmer Field Schools (FFS) were established in nine (09) communities living along the BNP, notably in the localities of Banda (HZ1), Dogba (HZ 4), Na’ari, Agorma (HZ 7), Ouro André (HZ 8), Larki, Pani, Wafango and Mboukma (HZ 9). These FFS gather between 20 and 25 interested and available farmers. These farmers are being equipped with natural soil improvement techniques through the production and use of compost (biological fertiliser) and human urine as a nitrogen fertiliser, the adoption of agroecological farming techniques through the planting of fertilising species, and pest control using biopesticides produced by the communities themselves. The beneficiaries were also trained in traditional water-holding techniques in the soils of the Sahel zones, such as the Zaï (a traditional technique for reclaiming degraded land) and the construction of bunds and stone barriers.

Since 2021, Forêts et Développement Rural (FODER) has been implementing the project Ecosystem of North Cameroon: Towards an Integrated Landscape Approach (EcoNorCam) in partnership with the Centre for Environment and Development (CED) and the Wildlife Conservation Society (WCS), with financial support from the European Union (EU). Through an integrated landscape management (ILM) approach, the EcoNorCam project strives to ensure a safe future in a flourishing environment for the communities living along the Benoue National Park. It is from this perspective that FODER supports communities in the adoption of innovative farming techniques suited to the environmental challenges of the North region.
SUPPORT GIVEN AFTER CONSULTATION AND APPROVAL OF THE BENEFICIARIES.

Prior to selecting the beneficiary communities, they were informed of the actions planned by the project, the possible contributions to improving their incomes, but also the constraints, particularly in terms of the impact on their personal agendas, and the restriction of their access to the land and resources located in the conservation area of the BNP. The support was only given to communities that undertook to respect the clauses on active participation in the FFS activities and to respect the access restrictions with regard to the BNP. Furthermore, the beneficiaries were free to replicate the farming techniques of their choice.

«We tested these techniques with the beneficiaries in the FFS to see what would be the results. At the end of the tests, each farmer was free to choose which of the techniques tested was best for him or her. Some went for compost and Zai, while others preferred human urine», explains Nathalie FIMANOU, assistant project manager at FODER.

THE IMPACTS ON AGRICULTURAL PRODUCTIVITY, INCOME AND THE ENVIRONMENT ARE ENCOURAGING

FFS activities are carried out on acreages ranging from 0.25 to 0.5 hectares. As a result of the replication of these activities by farmers in their personal fields (collective and individual), around 300 hectares of land is being restored. An improvement in yields has been observed on the restored plots.

Until FODER’s intervention with agroecological farming techniques, a quarter of a hectare (0.25 ha) could only yield 4 to 5 80 kg bags of deseeded corn to the farmers. Today, with the introduction of climate-resilient techniques, yields vary from 7 to 9 bags per quarter.
The propagation of agroecological farming techniques to farmers living along the Benuoe National Park is also one of FODER’s contributions to the fight against poverty. By eliminating the use of chemical fertilisers, the monitored farmers have managed to make significant savings on their agricultural production costs. "Farmers used to employ chemical fertilisers (urea and NPK are the most commonly used) to fertilise the soil, which was quite expensive, costing them between CFA francs 30 000 to CFA francs 35 000 for a bag of 50 kg of fertiliser. Bio-fertilisers made from organic waste available locally and accessible to all (cow dung, faeces of small ruminants and poultry, human urine, straw, etc.) enable them to save on the price of fertiliser. In this way, they can use the money earmarked for the purchase of chemical fertilisers for other household needs", explains Bonne Guissata, Project Manager.
ADAMOU Pierre  
Secretary General of the NANGAM DJOUNGO cooperative of OURO ANDRE

“Prior to being trained in using the Zaï technique as a fertiliser, my corn heads were very small and I barely harvested 02 bags of sorghum, mainly because of the poor condition of the land and its low yield. In 2022, after training and support in the use of the Zaï technique, and though I didn’t apply the technique correctly in some places in my farm, I harvested 05 bags of sorghum. This year (2023), I properly applied the technique and I’m convinced that my sorghum production will double and my corn ears will be bigger.”

S.M Sali HAMAN,  
Djaoro de PANI, 3rd degree Traditional Chief

«Today I am particularly proud to have mastered the human urine method for fertilising the soil. We now use this less expensive method, which only requires fermented urine diluted with water in a well-defined proportion, to fertilise our soil. For this crop year, I planted 40 rows of corn that I fertilised with human urine, and although it’s not yet harvest time, we can clearly see the change. My corn ears are bigger than those of last year (2022) and with the biopesticides I used to protect my corn, I have big and healthy corn ears. I believe my harvest will be better.»
Our cooperative was set up with the support of FODER, with a legal status and we even have a certification. We thank FODER for this support. Not only did FODER help us to set up our cooperative, but also trained us in the production of compost, human urine and bunds, and to chase away insects we have used self-made biopesticides on our plants. We have better yields and there was regret among those who didn’t use biopesticides on their plants because of the destruction of their crops by pests. We intend to sell the products of our FFS and keep the money for the activities of our cooperative. Last year, we used the money from the sale of our produce to build a parents’ school. This year we’re going to keep some of the money in our coffers, and the rest will be used to grant loans to members of the cooperative, so that everyone can expand their fields.

Jonas DRANGUE,
President of the TAGDAKA Cooperative of PANI

Djibrilla SADJO,
President of the REMOBE Cooperative of LARKI
A number of 348 farmers, including 219 women and 129 men, are committed to using farming techniques that are resilient to climate change.

A number of 33 community leaders trained in compost making and other climate-resistant farming techniques (zaï, earth bunds, grass strips, RNA, etc.).

A number of 9 community composting units set up.

A number of 7 farmers’ organisations supported in setting up simplified cooperatives for the production and marketing of cereals, legumes and vegetables (corn, sorghum, soya, cowpeas, groundnuts, onions, etc.). Three of these are also involved in the cashew nut production (nursery and planting);

More than 3,000 seedlings (neem, shea, baobab and cashew) produced in collaboration with ReSi-NoC and CERAF to secure protected areas, hunting zones and wildlife corridors in the Benoue National Park.

A number of 3,720 trees planted, including 1,200 cashew nuts, 2,400 living hedges and 120 fertilisers. The activity will continue in 2024.

This stocktaking sheet was produced within the framework of the project «Ecosystem of North Cameroon: Towards an Integrated Landscape Approach» (EcoNorcam). The contents of this document are the sole responsibility of FODER and can in no way be taken to reflect the position of the European Union and the project’s implementing partners.
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Corn crops fertilised with chemical fertilizer _Ouro André_