

PROJECT:
**“SUPPORTING AND STRENGTHENING FARMERS' RESEARCH NETWORKS TO
IMPROVE LOCAL INNOVATION IN BURKINA FASO AND IN MALI, PHASE II”
(FaReNe II)**

Update on 2020 activities in Burkina Faso

► Implementation of the Local Innovation Support Fund (LISF)

Within the framework of the LISF, three innovations have received funding from the project:

- The production of feed to boost the growth and laying of guinea fowl, proposed by the group of guinea fowl breeders of Pougyango, Commune of Gomponsom (Northern Region);
- The development of partitions based on stone bunds vegetated with *Andropogon gayanus* for rice production in arid environments, proposed by a farmer from the village of Kagpesgo in Zondoma (Northern Region);
- Combining half-moons with compost as a means of restoring drylands to improve agricultural productivity and household income, proposed by a farmer from the village of Bomboarighabou, Commune of Manni (Eastern Region).

The total amount of funding provided by the project for the experimentation on these innovations was 751,500 FCFA.

► Conducting joint experimentation in Gomponsom

Joint experiments were conducted with the network of innovative farmers of Gomponsom. These are:

◆ *Sorghum and cowpea association: 2 lines of sorghum & 2 lines of cowpea # 4 lines of sorghum & 2 lines of cowpea*

From the evaluation of the yields obtained, it was found that the association "4 lines of sorghum & 2 lines of cowpea" gives the best performance; it offers the best relative yield of sorghum (789 kg/ha) and cowpea (416 kg/ha).

According to the farmers, the association also has advantages in terms of execution of cultivation operations. It provides a certain amount of aeration, making it easier to use agricultural equipment during maintenance operations.

◆ Performance of improved and local compost: Improved compost on Kapèlega sorghum # Local compost on Kapèlega sorghum

The results show a yield advantage for the improved compost of 1,152 kg/ha compared to 864 kg/ha, i.e. a 33% surplus for the improved compost. Experimenting farmers generally appreciated the improved Niessega compost but noted that the product is light and easily exuded by runoff.

◆ Efficiency of effective microorganisms (EM) on crops (sorghum and cowpea): sorghum Kapèlega with EM # sorghum Kapèlega without EM (farmer practice) / cowpea K VX-745-11P with EM # cowpea K VX-745-11P without EM (farmer practice)

The results show the same trends as for the application of compost. With EM, the yield of cowpea was 288 kg/ha and without EM 216 kg/ha. The EM had more of a fertilizer role. The farmers who participated in the trials generally appreciated this advantage.

EM is an introduced technology: an NGO working in agroecology gave the training and the farmers are trying out EM as an alternative to chemical fertiliser, as EM is chemical-free and acts as both fertiliser and biopesticide. The strain of bacteria used for EM is local; it is harvested in the village forest. The constraints are that, to grow these different strains of bacteria, one has to use animal milk, which is not available all year round and there is often competition with alternative uses of milk. One also needs sugar without chemical additives. Therefore, the question of the availability and cost of EM must be raised, as well as the need for technical know-how that is not always accessible to all farmers. Its use should be based on production objectives, particularly in market gardening, if it is economically profitable.

► Capacity strengthening of the members of innovative farmers' networks

Two training/retraining sessions were undertaken for the three networks of innovative farmers in Manni, Gomponsom and Gourcy. The first session took place in Manni for the Manni network and the second in Yako for the Gomponsom and Gourcy networks.

The objective was to strengthen the capacities of the innovative farmers' networks of Gnagna, Passoré and Zondoma Provinces, with a view to taking the lead in the Participatory Innovation Development (PID), the management/perpetuation of the Local Innovation Support Fund (LISF) and activities related to the promotion of farmers' innovations.

Thirty-five innovative farmers from the three networks participated in these two sessions, including 13 women.