Conservation Agriculture for improved soil quality and increased production

Good Practice AT A GLANCE





Experience of SCORE - Spiritan Community OutReach Ethiopia In 5 Kebeles of Gamo Zone, SNNPR / ETHIOPIA

Crop production was declining in the project area. Smallholder farmers could not produce sufficient food for their consumption. Farms in the highlands were increasingly depleted of soil organic matter. Lack of nutrients became a limiting factor for production. The farmers in the lowland and midland areas were challenged by climate change effects like drought. This led to crop failure due to moisture stress.

The solution: Introduction of conservation agriculture (CA) practices. These include minimum tillage, crop rotation, intercropping and mulching. CA increases the organic matter and nutrient content as well as the water retention of the soils.

Experience description

The project started by recruiting community animators promoting the concept of CA and selecting volunteer households who could avail plots for field trials. Knowledge and skill trainings on CA principles and experiencesharing visits were conducted. Each lead farmer was expected to recruit new farmers per year, thus 1600 farmers (31% female) were reached by end of the project. The local government picked interest and requested for training of officers on CA. The positive impacts of the practice on crop production, soil fertility and socio-economic factors were scientifically assessed by Arba Minch University throughout the project.



Other characteristics



IMPACTS

- Positive impact on productivity and income was achieved
- Labor demand for agriculture reduced, allowing for other income generating activities
- Application of mineral fertilisers and pesticides reduced
- Soil carbon storage contributes to mitigate climate change
- Improved soil properties enhance resilience to climate change



CHALLENGES

- CA requires large amounts of mulching material, which is not easily available because of competing uses (roof cover, animal fodder)
- o Initial resistance by the local government that promotes conventional agriculture (government perception of CA changed during the project through active engagement)



LESSONS LEARNED

- Farmers' cooperatives facilitated information sharing on CA, marketing and access to inputs
- CA is well adopted by female farmers because it reduces labor demand
- Nearly organic production methods of CA create an opportunity for marketing the produce



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Sector: Rural Development – Natural Resource Management

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