

ETHIOPIA



Shella Mella Cotton Cooperative

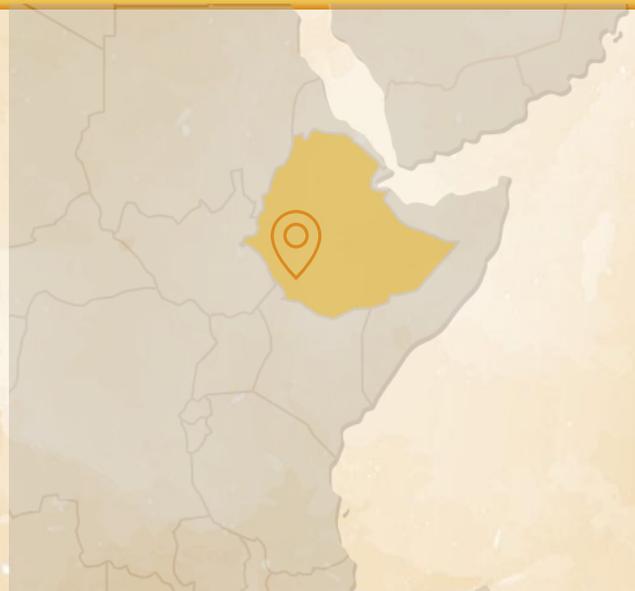
Sustainable cotton production and sale through the use of agroecological farming techniques and a producers' cooperative.

Map

The initiative is situated in Gamo Zone, in the Southern Nations, Nationalities and People's Region (SNNPR Region).

The initiative is located adjacent to the Nechsar National Park and the Abaya and Chamo Lakes. The altitude of the area is between 1,100 and 1,650 metres above sea level.

This zone is a biodiversity hotspot areas of the Great Rift Valley with many resident bird species. It is also one of the places in the Rift Valley where migratory birds from Europe come to spend the northern winter.



Context



Agriculture intensification with the use of agrochemical (both by smallholder farmers and commercial farms) has been strongly promoted by the government in order to increase production and productivity. However, this approach has given rise to numerous public and environmental health concerns in the area and also poses threats to biodiversity including beneficial insects. It is in this context that the Shella Mella Cotton Cooperative has promoted a greener production system.



Description

The Shella Mella cooperative established in 2013 by founding members who believed in the potential benefits of IPM. The cooperative supports its 200 members in shifting from a conventional to organic production, with on-going support from the Pesticide Action Network (PAN). The cooperative supports its members in different aspects :

Seed was initially sourced from the national cotton research centre in Melka Worere in 2015. PAN provided support in the selection and provision of seeds with better phenotypes, starting at the boll formation and opening stages. The cooperative was certified organic in 2017. It plays a key role in seed selection and distribution of organic cotton seed to its members.

Soil fertility enhancement: As certified organic cotton producers, the farmer members of the cooperative fully implement organic means for soil fertility enhancement – including use of green manure, farmyard manure, compost, crop rotation and sowing leguminous plants during the off-season. The practices are fully documented in the Cooperative's Internal Control System (ICS).

Plant protection: Plant protection is based exclusively upon biological control agents and plant extracts, including neem seed extract. Food sprays are used for plant protection. The food spray method involves enhancing naturally occurring predators to achieve biological control of cotton pests. The food spray attracts the natural enemies of pests to farmers' fields. This is done by the following three separate but linked components; (a) manipulating the crop habitat; (b) spraying the cotton foliage with food spray; and (c) avoiding the use of synthetic pesticides which will disrupt and kill natural enemies of cotton pests.

Market: Cotton has two major value chains in the area (i) cotton sold as raw cotton to traders and textile factories (ii) cotton sold at the local market for hand spinners and handicraft cooperatives which are engaged in the production of traditional clothes (this is a relatively limited market). Recently a contract farming scheme has been implemented whereby the cooperative sells its cotton directly to textile factories, and the textile factories in turn support the extension system.



Results and Benefits



In addition to the Shella Mella Cooperative, a further 3 other cooperatives have been established, enabling thousands of farmers to sell their cotton at better prices, **increasing profits for farmers**. The Cooperative buying price increased from 15 ETB/kg in 2013 to 50 ETB/kg in 2021 and the selling price rose to 80 ETB/kg in 2021. Half of the Shella Mella members are organic, and the Cooperative supports the remaining non-certified producers in their transition to fully organic production. “Middle men” have been excluded from interfering with the market and reducing farmer incomes. Once the Shella Mella Cooperative entered the market and farmers received profits, other farmers overcame their hesitancy and new cooperatives were established.

The pilot project on the use of **Integrated Pest Management (IPM)** was initiated in 2006. Using a Farmer Field School approach, this project supported more than 3,000 farmers in 14 villages to adopt IPM on their organic cotton production. **200 farmers have fully switched to the use of food spray** methods to produce organic cotton. The number of **women participants** is increasing and currently women comprise 30% of the participants of the Farmers Field Schools.



Practical and experiential learning methods are used within a learner-centred approach. Farmers carry out trials, experiment, teach and learn on their own farms, supported by training manuals and videos that explain innovative farming methods including food spray preparations. Factsheets, website articles, newsletters and informative brochures are used to disseminate information. The FFS curriculum is revised every year so improvements/amendments can be done. Farmers participate in training sessions every week for 3-4 hours and also undertake assessments and record their observations. The process supports collective decision based on their observations. It creates a farmer to farmer learning opportunity. On the other hand, **exchange visits** are organised between farmers of different villages.

The production system is more resilient than in the past because it is **better organized**, with **better administration**. The Internal Control System is updated annually, and new approaches to farm management are included. Records are kept on a daily, weekly, monthly and annual basis respectively. **Logbooks** are kept to compile all of these record goes. Information about trials, experiments, farmers’ trainings, etc., has been compiled in the logbooks for the past seven years.



Lessons learned & reflected FAO principles



Resilience

The production system is based on the use of ecological processes, ecosystem services and enhancement of the ecological functions. This supports the climate change actions and enhances human wellbeing, creating more resilient communities.

Human & social values

The extension and training processes empower farmers as well as the officials that provide them with support services. The Cooperative and associated women's spinning groups and seed enterprises have created greater social interaction and cohesion.

Diversity

Natural processes are harnessed for pest management and enhancement of soil fertility, which in turn conserves biodiversity. Predatory arthropods are attracted to the cotton fields by food sprays and feed on pests, capitalising on the ecological processes of predator/ prey interactions within a diverse agroecosystem.

Culture & food traditions

The initiative is focused on the sustainable production of cotton, which is integral to Ethiopian culture and traditional dress.

Co-creation & sharing of knowledge

The initiative has been based on farmer participation, and has drawn on the Indigenous knowledge of farmers. Farmers have been able to gain insight from scientific research and to actively learn and innovate. Peer learning amongst the farmers has enabled them to share their knowledge effectively.

Efficiency

The organic production systems use less purchased external inputs. Economic comparisons between the organic and conventional production systems in the area show that the organic system is at least as profitable as the conventional one.

Synergies

The organic cotton system was dependant on interactions and cooperation between government agriculture offices, research centres, donor agencies, research institutes, certifiers, farmer organisations.

Responsible governance

The cooperative is well governed and well managed. As a result, the farmer members benefit from reliable market access for certified organic cotton, and receive a better price and an equitable share of profits

Recycling

Composting, green manuring and farmyard manure are used to increase soil fertility. Available crop residues, broad leaved weeds, and manure are all recycled.

Circular & solidarity economy

The cooperative ensures that farmers receive a premium price for their product from the textile factories prices. Some of the cotton is purchased by local cotton spinners and weavers.

Contacts and Bibliography

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The AVACLIM project aims to create the necessary conditions for the deployment of agroecology in arid areas.

For more information : www.avaclim.org

Financial partners:



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Operational partners:



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