

Scaling-Up Conservation Agriculture in Ethiopia

January 2020

Program Highlights in Ethiopia

- Over 27,000 farmers are practicing conservation agriculture, including nearly 9,000 women.
- In close partnership with the Ministry of Agriculture, conservation agriculture has been accepted as part of the agriculture extension system and a new Master Trainer program is being provided for government and NGO staff.
- Participating farmers have accessed new market opportunities, enabling them to earn a premium for their farm products.
- Self-help groups are giving 7,856 members (82% of whom are women) access to capital and opportunities for leadership.

Scaling-Up Conservation Agriculture in East Africa is a five-year program (2015-2020) of Canadian Foodgrains Bank with funding from the Government of Canada to enable 50,000 smallholder farmers in Ethiopia, Kenya, and Tanzania to practice conservation agriculture. Now in its fifth and final year, key areas of focus include building and strengthening support structures that will enable conservation agriculture (CA) to continue beyond the *Scaling-Up CA* program, including policy advocacy, training government extension officers, and facilitating strategic private sector linkages.

In Ethiopia, the program is implemented by Mennonite Central Committee and Tearfund Canada with three local partners: FH Ethiopia (FHE), Migbare Senay Children and Family Support Organization (MSCFSO), and Terepeza Development Association (TDA). Program sites are located in Assosa, Benishangul Gumuz Region; East Gojjam, Amhara Region; and Wolaita, Southern Nations and Nationalities People's Region respectively.

What is conservation agriculture?

Conservation agriculture is characterized by the practice of three principles: minimal or zero tillage, permanent organic soil cover (mulch or cover crop residues), and diversified crop production.

Adoption and Innovation of Conservation Agriculture Farming Systems

As of September 2019, the three partners in Ethiopia have trained 29,333 farmers in CA principles. Of these, 27,333 farmers (8,680 female and 18,653 male) have adopted at least two of the three CA principles. This is already 10% more than the target of 24,820 farmers practicing CA in Ethiopia by September 2020.

The program emphasizes innovation and adoption of conservation agriculture principles to fit local contexts. Each project site has facilitated experimentation through demonstration plots or farmer field schools. This has included farmer-led, contextualized experimentation with various green manure/cover crop (gm/cc) seed varieties (lablab, cowpea, pigeon pea, desmodium and velvet bean) and Rhodes grass to diversify crop production and address challenges with mulch access. Partners are also working with local academic institutions to experiment with contextually appropriate mechanization options for CA systems.

Throughout the program, project sites in Ethiopia have experienced challenges with drought, flooding, and other threats to agriculture such as fall army worm. Farmers who have been practicing CA for multiple seasons found that their crops were more resilient to waterlogging and water scarcity and that their crops were less impacted by pests than other nearby farmers.

In partnership with Farm Radio International (FRI), information on conservation agriculture is also disseminated through three FM and community radio stations with a reach of over 900,000 listeners. As a result, over 720,000 farmers are partly/fully experimenting with CA principles learned from the radio.

Engaging the Ministry of Agriculture

Throughout the program, relationships have been developed with government workers from the national level to the woreda level through regular communication, workshops, and exposure visits to program sites. This has contributed to the adoption of CA as part of the Ministry of Agriculture system, which will lead to the promotion of CA throughout Ethiopia.

The program has partnered with the Ministry of Agriculture, regional Bureaus of Agriculture, and zonal and woreda agriculture officials in a number of ways, including:

- Partnering with the Ministry of Agriculture in the development of CA curriculum materials and other resources for government extension workers.
- Hosting regular exposure visits to program sites for national and regional government experts, familiarizing them with the impact of CA in the Ethiopian context.
- Hosting a national CA conference in 2019 in partnership with the Soil Fertility Improvement Directorate. His Excellency Dr. Kaba Urgessa, State Minister of Agriculture, celebrated partnership between the Ministry of Agriculture and NGOs in facilitating the uptake of conservation agriculture.



- Developing and implementing a Master Trainer program in four regions of Ethiopia to equip government and NGO staff with technical knowledge and adult education facilitation skills to be effective CA trainers.
- Partners are frequently conducting workshops for and partnered with agriculture officials at the zonal and woreda levels, creating local structures that will sustainably support CA in the project communities.

Empowering Women

Ethiopian partners are taking action to address gender inequalities through their CA programming. For example, in Amhara, the program partnered with the Ministry of Women and Children's Affairs to facilitate gender training for nearly 900 CA farmers. The training strengthened the capacity of women participating in the CA program and facilitated discussions with women and men to ensure that women acquire the economic and social benefits of the program.

In Assosa, women have been early CA adopters. This enables them to prepare their land without relying on ploughing services that were expensive and often served women last. Women have also found that CA adoption significantly reduces the labour required for farming, particularly for weeding. By increasing yields and farm income, reducing expenses, and reducing labour requirements, CA has meant that women do not need to rely on precarious employment and have found new economic opportunities.

Self-help groups are empowering women with leadership skills and enabling them to achieve economic and social freedom. To date, 368 savings groups with 7,856 members have been established, of whom 82% are women. The groups provide women with opportunities for self-expression and become community leaders. Groups are encouraged to practice rotational leadership so everyone has an opportunity to gain skills and confidence. Loans through the savings groups have created economic opportunities. Some groups are also jointly purchasing agricultural inputs, reducing the cost of these supplies for members.



Supporting Market Linkages and Livelihoods

Farmers that have adopted CA are experiencing increased and more consistent yields. This has led to an increased need for improved post-harvest storage and marketing strategies. The *Scaling-Up CA* program has worked with partners to promote the use of hermetic bags and is linking farmers with suppliers of the bags. This allows farmers to sell crops later in the year when prices increase or store the crops until the next lean season, ensuring better household food security.

Aggregation groups formed through the program are now finding new purchasers for their farm products. In Amhara, 40 aggregation groups sold 92.5 MT of wheat to an agroprocessing company, earning a premium for participating farmers. Similarly, in Benishangul Gumuz, aggregation groups have increased the value farmers earning from farm products by nearly 10%.

Facilitating multi-sectoral co-operation

Canadian Foodgrains Bank and local partner staff participate in the Ethiopia Agroecology Network, along with local and international NGOs, government, universities, research centers, and the private sector to facilitate collaboration. To further develop and strengthen support systems for conservation agriculture farmers and ensure that they continue beyond the *Scaling-Up CA* program, the Ethiopian partners implemented stakeholder forums in each of their programming areas. Such coordinated events provide hands-on learning exchanges and networking opportunities on emerging good agronomic practices and innovations and multisectoral collaboration with various actors (including traders, government, academics, researchers) in the zone.

Creating and sharing resources

To facilitate trainings for farmers, government extension agents, and local NGOs, a training curriculum was developed and is available in Amharic. The curriculum covers key conservation agriculture topics including minimum tillage, the importance of soil cover, precision planting, cover crops, weed management, and crop residue. The curriculum has been disseminated to Ethiopian project partners and the Ministry of Agriculture and Natural Resources.

For more information

Mueni Udeozor, Program Coordinator
mudeozor@foodgrainsbank.ca
+254 7912 73109

Frew Beriso, CA Technical Specialist
fberiso@foodgrainsbank.ca
+251 (0) 911 358 506

Canadian Foodgrains Bank is a partnership of 15 Canadian churches and church-based agencies working to end global hunger through food assistance, nutrition, and sustainable food security programming. This program is being implemented by three Canadian Foodgrains Bank members: Mennonite Central Committee Canada, Tearfund Canada, and World Renew.

<http://www.foodgrainsbank.ca>