



Advanced Maize Seed Adoption Program

Improving farmer productivity in Ethiopia

There is a significant need to increase food productivity in Ethiopia and Sub Saharan Africa. Maize is one of Ethiopia’s most important cereals in terms of production; grown by about 8 million farmers. A primary challenge of the Ethiopian maize value chain is access to quality improved maize seeds, which substantially impacts the productivity of smallholder farmers. Also, once harvested, maize is extremely vulnerable to significant postharvest losses due to mold, vermin and theft.

A collaborative approach

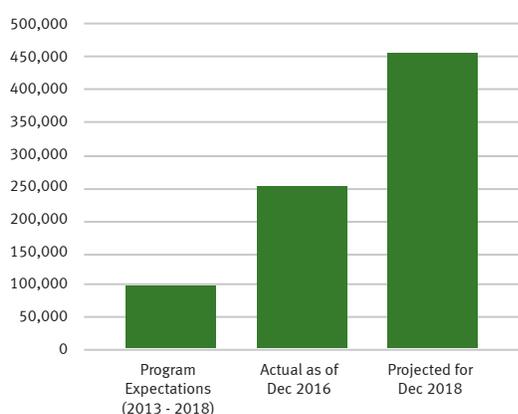
Launched in 2013 with the Government of Ethiopia, the United States Agency for International Development (USAID) and DuPont Pioneer, the Advanced Maize Seed Adoption Program (AMSAP) has become a model program for improving productivity of smallholder farmers in Africa. The success of the program has led to the launch of a similar program in Zambia, with plans to expand in additional countries.

The program objectives include:

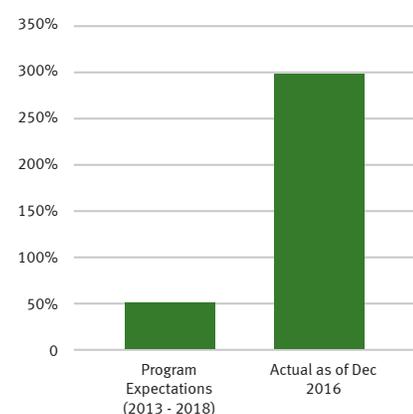
- Increase productivity by transitioning farmers from open-pollinated to improved hybrid seed varieties
- Reduce post-harvest losses
- Expand access to credit, inputs and markets
- Build the capacity of extension services to disseminate skills and best practices to Ethiopian maize farmers

AMSAP aligned well with the government of Ethiopia’s Direct Seed Marketing and Blended Fertilizer Programs, both piloted in 2014. Farmers have greater access to suitable fertilizers, and can make individual decisions on seed selection.

Smallholder Farmers Impacted



Productivity Increase from planting hybrids



Surpassing program goals and transforming the value chain

After four years of the five year program, the major goals of the public private partnership have been achieved and surpassed.

- By the end of 2016, **more than 250,000 smallholder farmers in 53 districts** in Ethiopia were reached, significantly surpassing the initial goal of reaching 100,000 total farmers.
- **More than 13,500 demonstration plots** were planted.
- Participating farmers increased maize yields by an average of **300 percent**, and increased incomes by as much as USD 1,500 annually.
- New seed and grain warehouse facilities built in local communities for farmers to store seed and grain improved postharvest grain storage, **reducing losses by 30 percent**.
- **Sixteen shellers and 16 village level storage units** were built with stabilized earth bricks, each holding one ton of maize grain for safe post-harvest practices at the household level.



From subsistence to stability

Gifty Jemal Hussein was a subsistence farmer who was barely able to meet her family's food consumption needs by growing false banana and open-pollinated varieties of maize. To make ends meet, Gifty relied on a meager income from a few coffee plants in her back yard. With a disabled husband, food production and income generation fell to Gifty.

Through the AMSAP program introduced by USAID's Feed the Future, Gifty was given a sample of DuPont Pioneer hybrid maize seed and learned how to properly plant, manage and harvest the crop. In the first year, she produced 13 quintiles on .25 hectares – nearly three times what she produced in previous years.

Gifty was so proud of her maize yields that she gave a quarter of her harvest to her children in Addis Ababa, and sold the remaining production. With the profits, she purchased a dairy cow and contributed to her daughter's wedding.

Gifty's success inspired other women in her village to join her in forming a 20-member farming group. These women planted Pioneer maize on one hectare of government-owned land and harvested 42 quintiles of grain.

With the harvest profits, the group purchased 10 cows, out of which six were pregnant, doubling their value. The group also established a savings account that allows them to invest and expand their operation, as well as to provide a safety net during hard times.

The women's success allowed them to expand and they now plant five hectares of land with improved maize hybrids.

Gifty has also been able to expand her personal production to one hectare, from the original quarter-hectare, and has access to more nutritious foods. She grows carrots, cabbage, tuber, and teff in addition to maize, false banana, and coffee.



Gifty Jemal Hussein

“The Feed the Future AMSAP program has changed my life for the better.”

Our commitment

As a founding partner in the AMSAP collaboration, Pioneer provides sample hybrid seed for demonstration plots and facilitates field training sessions for participating farmers. We are building a network of farmer dealers to advance the acceptance of high-quality inputs such as hybrid seed, and the adoption of new management and production techniques.

Pioneer is also committed to sending one extension worker per region each year for advanced university training.

The goal of AMSAP is to transform the entire maize value chain - strengthening farmers and the ability of the government to provide extension services to farmers, allowing them to move from subsistence to successful businesses.

The AMSAP approach is consistent with DuPont's long history of collaboration and innovation. We look forward to establishing new public-private partnerships and continuing along a path that will help develop the tools needed to deliver an abundant supply of healthy food to everyone in the world.

“Solutions must be collaborative - reached in concert with communities, governments, NGOs, farmers and businesses with the combined expertise and resources to find innovative solutions to these problems.”

Krysta Harden
DuPont Vice President of Public Policy and Chief Sustainability Officer

Building Infrastructure in Ethiopia



In 2014, DuPont Pioneer constructed a 2,500 square meter modern seed processing and storage plant near Addis Ababa. The improved postharvest plant's capabilities include automated seed cleaning, treating and packaging as well as gravity sorting and grading - the first plant of its kind in Ethiopia.

Operating at full capacity, the plant also provides much-needed permanent employment to skilled workers as well as seasonal laborers.

Learn More

www.usaid.gov/news-information/videos/advanced-maize-seed-adoption-program

