

PRODUCING QUALITY SEEDS MEANS QUALITY YIELDS

WORKING FOR smallholder farmers in Central America

WORKING TO improve the quality of seeds they use in their fields

WORKING WITH Ministries of Agriculture and National Agricultural Research Institutes in all Central American countries

WORKING THANKS TO Spain



Farmers traditionally depend on seed certified by government authorities – seed that they know has been inspected by independent evaluators to deliver the best possible harvest for that variety of grain. However, in Central America, the seed fields that smallholders depend on are rarely certified. Governments simply do not have the capacity to inspect the enormous number of small fields that are growing seeds of maize and beans, main crops of the region.

Looked at side by side, it is impossible to tell the difference between fields of maize and beans being grown for food, and those being grown as seed for next year's crop. Yet there is a critical difference. The maize and beans being grown for food are rated for their taste or nutritional content. The ones being grown for seed are rated according to traits such as germination viability, genetic purity and the genetic characteristics that influence their performance in the field.

In 2010, FAO initiated "Seeds for Development", a project that addresses the low productivity of basic grains on the family farms of

Some two million small family farms of one hectare or less dot the agricultural landscapes of Central America. In most cases, farmers plant two main staple crops – beans and maize. These fields rarely produced the yields they could have, because the farmers had no access to a crucial input – quality seed. Seed is one of the least expensive but most important factors influencing yields. An FAO project to improve farmers' access to quality seed has improved the situation greatly, by supporting establishment of seed-growers' associations and providing them with training both to improve quality and to establish enterprises. As seed quality has improved, so have farmers' yields.

Central America. It recognized that lack of access to quality seed was a huge factor in the productivity issue, and set out to help small independent seed farmers – the "informal" seed sector – improve the quality of their production.

CREATING SEED-GROWERS' COOPERATIVES

The first step was bringing farmers together into seed-growers' cooperatives and associations.

Having associations not only made it more efficient to provide training, it gave growers a united voice to address governments' seed authorities and request support.

The training covered production, quality control, enterprise management and marketing aspects of seed enterprise. It incorporated the informal seed sector into the formal sector by connecting it to national agricultural research centres



Central America has 29 new local seed businesses thanks to an FAO project for improved seeds.

and public seed authorities, while simultaneously working with national governments to improve the process for certification, and review policies and programmes that affect local markets. This all led to the creation of 29 local businesses that now supply improved seeds to the farmers in their areas.



Farmers who planted their fields with quality seeds doubled their yields, which provided enough beans for more than 450 000 families.

QUALITY SEED USE DOUBLES

The ministries of agriculture and national agricultural research institutes in all Central American countries also participated in the project, working with FAO and its partners to improve seed quality by providing expertise and quality control, and supplying basic seed for smallholder seed enterprises. As the project ended, it had doubled the amount of high-quality seed used in the bean and maize fields of smallholders in Central America – going from supplying 8 percent to 16 percent of the nation’s seed requirement. Today, the farmers’ associations continue to increase the quality and quantity of seed they offer to their customers, who most often are also their neighbours or government seed-assistance programmes and humanitarian agencies.

This progress also has had a considerable impact on food security. By December 2012, the enterprises supported by the project produced more than 6 192 metric tonnes of high-quality bean seed and 754 tonnes of quality maize seed – enough to plant 121 834 hectares of beans and 67 000 hectares of maize. But that is just the quantity. The true measure of success is in the quality, because farmers who

Seed enterprises supported by an FAO project have produced more than 6 000 tonnes of quality bean seed.

planted those seeds doubled their yields, producing enough beans to provide food for more than 458 000 families and enough maize for more than 188 000.

Looking to the future, governments’ recognition of the importance of this smallholder seed sector has set the stage for continued improvement in policies to support seed production and improve links to the research centres to promote ongoing breeding programmes. Today the members of the seed-producer associations continue to work together, focusing on ways to continue increasing the quality of their seeds and, in turn, the crop yields of the farmers who plant them.