Linking public breeding with private enterprise in Kenya

Even though bean farmers would tend to purchase new seed only every 3 years (sowing seed from their own harvests in most years), commercial bean seed production is still potentially profitable.

In 2008, a large, red mottled bean known as KK8 was bred by the Kenya Agriculture and Livestock Research Organisation (KALRO), using germplasm from the International Center for Tropical Agriculture (CIAT) in Colombia. KK8 is resistant to bean root rot, gives high yields, cooks quickly, and tastes good.

But until 2 years ago, many farmers had never heard of KK8, reflecting previous neglect of beans, even though they are among Kenya’s most important food crops, second only to maize. Bean breeding, seed production, and distribution have largely remained in the public domain.

A new public-private partnership, brokered by the Syngenta Foundation for Sustainable Agriculture and led by KALRO, is getting improved bean varieties into the hands of more farmers. The catalyst for change was a disease outbreak that devastated maize in western Kenya during 2012.

Hundreds of thousands of smallholders affected were working with One Acre Fund, which had a crop insurance scheme but also scaled up plans to diversify into other crops. For beans, they ran into a hurdle: seed availability. Of Kenya’s 35 private seed companies, only a few sold bean seed, and not one could meet the demand.

Bubayi Products Ltd., a family-run seed business in Kenya’s North Rift Region, had the capacity to produce quality seed and was willing to take the risk. While Bubayi tested bean varieties for yield and disease resistance, One Acre Fund tried out the new seeds with farmers. They selected KK8.

The seeds – certified to ensure quality – are proving popular. In 2013, Bubayi supplied 100 tons of KK8 seed to One Acre Fund. The following year, demand among One Acre Fund clients grew by 8%, demonstrating that farmers are willing to invest in bean seed.