Farming a quarter-acre plot, in an area with poor rainfall and low-nutrient soils, can never be profitable. Or can it?

Partnerships mediated by 2SCALE are transforming livelihoods in some of the poorest areas in Kenya. More than 7,000 farmers have signed contracts with Equator Kenya Ltd, a leading chili processor and exporter. The farmers supply Equator with high-grade fresh chilies, which are processed and exported to Europe. The company pays its farmers a substantial premium – up to 30 percent higher than market price – for quality that will satisfy the most demanding customers.

2SCALE farmer groups grow African Bird’s Eye chili, known for its color and flavor. A properly managed, irrigated 200 square meter plot with 500 chili plants can generate revenues of KSh 60,000 ($700) from an investment of KSh 32,450 (inputs + labor, but excluding equipment purchase). The profit margin is a healthy 46 percent, rising to over 90 percent when only family labor is used.

The bottom line: farmers have doubled or tripled their incomes through chili cultivation. In addition, this partnership has introduced production and financing innovations that are used by thousands of chili farmers in three counties in coastal Kenya.

The key innovation is drip irrigation, which eliminates uncertainties (ensuring harvests even in dry years), and substantially increases yields as well as water-use efficiency. Low-cost drip irrigation kits have enabled farmers to extend the season from 4 months to 10 months, providing stable,
year-round income. Other innovations include blended fertilizers and small-pack pesticides. The fertilizers are not the standard NPK, but blended formulations (based on IFDC research) tailored to crop/soil requirements. The pesticides are safe (low toxicity) and sold in single-dose sachets that are convenient and affordable.

2SCALE works with Equator to mobilize farmers, helps them form and officially register their groups, provides training to agro-input retailers, and brings in new partners. The rapid spread of drip irrigation technology shows how well this approach works.

2SCALE and Equator first offered financial incentives to encourage farmers to use the new technology, moving progressively towards a subsidy-free situation where farmers were willing (and able) to invest.

The first 160 kits were distributed free, in March 2012. Recipients increased production by 54 percent, from 1.3 kg to 2 kg per plant. In the second phase starting in August 2013, 500 more farmers received subsidized drip irrigation kits through a partnership with 2SCALE and local NGOs.

In the third phase (ongoing), the project helped introduce a credit program in partnership with Dutch NGO Solidaridad. Farmers receive the kits on credit. Repayment is done through chili deliveries, and goes into a fund to assist more farmers. Already 1,500 farmers have bought drip kits — and this is expected to exceed 5,000 in the next 2 years.

Next, Equator aims to upgrade its processing equipment to improve quality and throughput. This will ensure that the company can absorb the increasing volumes that farmers produce, and continue to pay them premium prices.

“The peak chili harvest is in November and December. So we get a good sum of money in January — just when we need to pay our children’s school fees.”

— Gilbert Thoya, chili farmer in Marafa

The 2SCALE project is funded by the Netherlands government and implemented jointly by IFDC, ICRA and BoPInc. 2SCALE was launched in June 2012. In the next 5 years we aim to develop 500 viable, sustainable agribusiness clusters in nine countries across Sub-Saharan Africa, reaching 1.1 million farmers.