Improving Incomes through Post-Harvest Service Providers

Development Challenge
Smallholder farmers are forced to sell quickly after harvest since they lack storage facilities that will retain the quality of their produce. As they sell small quantities and in unpacked, mixed grade lots, they are unable to negotiate higher prices or wait for better market conditions. Challenges such as short shelf life of some agricultural produce, risk of spoilage, pest attacks, and quality deterioration, lead to distress sales and lower prices for farmers. In the absence of pricing information and standard quality assessment tools, smallholder farmers often accept lower prices because they do not know whether they deserve better, based on the quality or grade of their produce. Inadequate links with value chain players limit the value addition farmers can bring to the basic farm produce. By turning farm produce to food, farmers can increase their share of every dollar that end consumers spend on food.

Business Model
In an attempt to address this gap in the agricultural value chain, enterprises offer processing and packaging solutions to increase the shelf life of agricultural produce. They share the higher market prices of processed and packaged agricultural products with smallholder farmers by paying them premium procurement rates at the farm gate. Quality assessment conducted by these enterprises also contributes to transparent and often, improved prices for farmers, which motivates them to invest in better quality inputs so that they grow better produce, qualify for higher quality benchmarks, and reap the benefits of premium prices.

Processing adds value to fresh produce, thereby improving farmer incomes. This is particularly so for perishables with short shelf lives such as fruit and milk. Processing not only ensures longer shelf life, but also higher valued output that fetches better prices. Enterprises support farmers with sorting and packing, which improves the shelf life of agricultural produce. The process also involves branding that guarantees a certain quality for a certain premium. In Northeast India, Parvata Foods packs and brands organic fruits, vegetables and spices collected from the smallholder farmers and supplies at premium prices to leading retail chains.

Enterprises also add value to farm produce by undertaking quality assessment and certification. This allows for significant transparency in the quality that determines fair market prices of the produce. It not only allows farmers to negotiate better prices, but also motivates them to focus on enhancing productivity and quality as they see income gains improve with better quality.

Features of Post-Harvest Service Providers Business Models

- Processing
  - Social enterprises pass on the profits from premium rates of processed foods to farmers
  - Processors purchase excess fruits and vegetables from farmers, thus reducing post harvest losses

- Packaging
  - Packaging improves shelf life of perishable farm products like milk, fruits and vegetables
  - Packaging helps differentiated branding and marketing of agricultural products

- Quality Assessment Standards
  - Social enterprises undertake quality assessments of the products to ensure better price realization which is passed on to farmers
  - Motivates farmers to improve quality of their produce to qualify the quality benchmarks
Smallholder farmers in most developing countries are unaware about the benefits of packaging, processing and quality certification. Enterprises adopt innovative strategies and build innovative partnerships to build awareness. Claphijo Enterprise takes help from local women self-help groups that create awareness about its solar drier. Milk Mantra conducts demonstrations at parks, schools and tennis courts across the state regarding the importance of appropriate packaging to prevent spoilage of perishable items such as milk and milk products.

Smallholder farmers find it easier to go through the middlemen route, as they have been doing historically. It is a paradigm shift for some of them to move away from these relationships. Enterprises adopt different strategies to make it easier for the farmers to make this shift. SKEPL allows milk cooperative members to test the product for 2 months. This trial period allows the customers to test the machines and get familiar with modern methods of calibration of milk quality and quantity. A number of enterprises leverage local connections to understand customer requirements. This helps them design appropriate solutions and also engage with farmers more closely.

Post-harvest service providers eliminate middlemen and facilitate direct access to markets. To do this, they need to build or organize the supply chain from farm to processing unit, and finally to buyers. Often, the ease that they provide encourages farmers to shift from transacting with a known trader. Parvata Foods, for instance, is building integrated value chains for the organic farmers in Sikkim, by providing market links along with packaging and branding of the products obtained from them.

The business model helps to build financial sustainability of the smallholder farmers. A number of enterprises make payments for the agricultural produce at the farm gate, providing much needed liquidity and working capital. Parvata Foods pays 70 percent of the total value of the produce at the farm gate of the organic farmers in Sikkim. Likewise, SKEPL’s solutions ensure payment to the dairy farmers as soon as they supply milk to the milk-co-operatives. A few enterprises provide value-added food products at affordable prices to the financially weaker sections of the society. These organizations aim to fight malnutrition and poverty, in addition to helping farmers earn better incomes.

Grocery wholesalers, supermarkets and convenience stores are some customers of post-harvest service providers. The end-consumers for post-harvest service providers include upper-middle income to high-income populations that are able and willing to pay a premium for quality products and services.

Governments in developing countries are supporting small scale and micro food processing businesses by farmer families (particularly women) through aggregator models. A few enterprises engage in sale of small-scale food processing solutions to farmers.

Enterprises that have adopted a business-to-business approach have found it easier to achieve financial viability. This approach reduces the need for investments in branding and marketing, and also ensures them stable contracts for longer durations. Other enterprises focus on maintaining high quality standards and adopted innovative technologies to ensure financial viability. Tanzania based Brookside Dairy has developed key performance indicators to ensure consistent high quality production.

Post-harvest enterprises engage in different partnership models to maximize individual and common financial benefits. A number establish partnerships for business development and other associated activities, a few establish partnerships for financial support, while others seek technical knowledge and training support.

Results and Effectiveness

Given that its end customers are mainstream, and often global, this business model has significant potential for scale. This business model is also mature, with many enterprises that are over a decade old. Their reach and engagement with communities and end-buyer markets is therefore significantly stronger. Most of the milk processing enterprises have created impacts while providing financial uplift to small dairy farmers. SKEPL works with nearly 7,000 partners, each impacting at least 300 farmers. The enterprise has directly impacted nearly 2.1 million small dairy farmers in India.

The post-harvest services model has direct and indirect impacts on the lives of smallholder farmers that were otherwise delinked from the value chain. Given the labor-intensive nature of the business model, post-harvest enterprises also provide employment to women and youth from rural communities. Tanzania-based Arusha Women Entrepreneur deals in processing of peanut butter made from locally grown groundnut. The enterprise employs low-income women from peri-urban Arusha. Likewise, Kenya based Stawi Foods creates jobs for youth and smallholder farmers in Kenya.

Several interventions have led to direct increase in the incomes of smallholder farmers (self-reported by the enterprises). Nu Bree, for instance, has helped increase the income of small dairy farmers by a factor of 10. Likewise, Normin Veggies secures increased price premium of 10-20 percent for smallholder farmers compared to traditional supply chains.