Development Challenge
Poor market links substantially increase transaction costs and post-harvest losses for smallholder farmers. Agents and middlemen exist at every stage of the supply chain, leading to a long series of transactions before the farmer’s produce reaches consumers. Each of these middlemen retains a margin, allowing only a fraction of the final price of the crops to reach the farmers. Often remotely located and disconnected from mainstream market information, smallholder farmers rely on middlemen who are better informed about market conditions, especially about the prices further down the supply chain. With an increase in urban consumers’ incomes, there is an upward demand for fresh farm produce. Yet farmers lack efficient market links to participate in market-oriented production and tap these opportunities.

Business Model
Enterprises are leveraging technology to improve market links for smallholder farmers and meet the growing demand for fresh farm produce from consumers. They have developed Internet- (e-commerce) and mobile- (m-commerce) based platforms to market fresh farm products directly to consumers. The enterprises receive orders placed by customers on the technology platforms and collect the produce from the smallholder farmers for distribution. While this model is primarily focused on fresh produce, similar arrangements can be found for products (cereals, grains, rice, tea, etc.) that connect farmers directly to markets.

Enterprises procure produce from farm gates, and weigh, grade and package it at the farm. These enterprises pay farmers immediately on purchase of the produce. For example, Agruppa, based in Colombia, communicates orders to farmers a day prior to collecting it from their farms; it partners with local transporters to collect the produce from farms. Enterprises have leveraged the deep penetration of mobile phones to connect smallholder farmers and buyers. For example, MLouma in Senegal provides small-scale farmers a mobile and online platform to upload information about the availability of their produce for sale enabling buyers to connect with them directly.

A number of enterprises use algorithms to match farmers to buyers based on requirements and prices that farmers and buyers are willing to transact at. Upon sale, farmers either deliver the produce to buyers directly or seek support from the enterprises to transport the produce from farm gate to end buyer. For example, farmers on SokoNect’s platform deliver produce to consumers using their own transport or have the option to pay SokoNect a nominal fee to transport the produce to the consumers.

Features of Direct-from-Farm to Market Business Models

**Collection**
- Smallholder farmers are only able to cultivate and harvest small volumes of produce
- Purchase of all agriculture produce is not guaranteed
- Farmers rely on middlemen to collect and market their produce and receive delayed payments

**Marketing**
- No structured or differentiated marketing of farmers’ produce
- Farmers typically spend an entire day auctioning their produce at market yards
- Farmers are able to sell limited quantities of their produce, since produce with physical defects are rejected by agents at the market yards

**Distribution**
- The supply chain process between farmer and buyer includes middlemen, wholesalers, common market yards, and retailers resulting in delays in distribution and post-harvest losses of perishable produce
- Dependence on middlemen reduces farmers’ share of market prices
Enterprises need to hand-hold farmers to navigate through platform features and learn how to use information provided on the platform to price their produce. Enterprises also identify local farmer leaders and community champions, who interact with farmers and help in spreading awareness about the direct market link service. Creating awareness among farmers regarding what kind of products sell also plays a crucial role in success. On the consumer side, enterprises engage in marketing and awareness campaigns targeted toward on-boarding end customers and creating market demand.

Enterprises need to demonstrate the benefits of direct-from-farm platforms in comparison to traditional trading models. This includes the availability of real-time price information as compared to physical market yard auctions and the ability to receive payments immediately upon the sale of produce in comparison to staggered payments by middlemen. Go4Fresh encourages farmers to use its platform on a trial basis alongside selling their produce through the traditional government auctions and evaluate the mechanism. Partnering with local government agencies and local community leaders helps in establishing farmers’ trust in direct-from-farm platforms. In addition, building trust between buyers and sellers is imperative in setting up a direct-from-farm model.

Farmers are connected to end buyers through different platforms: voice calls, website, SMS on feature phones, or mobile apps on Internet-enabled smart phones. Enterprises design and develop the platform layout based on the level of mobile and Internet penetration among the farmer communities they intend to serve. Mandi Express is an SMS-based mobile phone applications that don’t require farmers to be Internet savvy. Research on providing services to rural populations showed that information must be presented in local languages for greater acceptance.

Smallholder farmers located in remote rural areas are subject to weak market link owing to inadequate infrastructure, bad road networks, and expensive transport options. Direct-from-farm marketplace platforms help farmers avoid this expense since buyers source the produce at the farm gate. Farmers are able to send query messages once registered on direct-from-farm platforms for real-time information and make informed decisions to sell their produce. Farmers also incur significant costs in employing labor for harvesting produce. Enterprises such as Markit Opportunity match farmers with buyers and provide an advance deposit as assurance of sale, enabling farmers to pay farm laborers.

Costs involved in connecting farmers and buyers may depend on the type of communication technology adopted. For instance, enterprises could choose between using Short Message Service (SMS) or the more efficient but expensive Unstructured Supplementary Service Data (USSD), which involves an upfront booking fee for the USSD platform followed by monthly maintenance costs paid to mobile network providers.

Enterprises that allow farmers to directly upload their produce on the platform charge farmers a transaction fee per upload and charge them a commission fee if the transportation of produce from farm to end buyer is undertaken by the enterprise. SokoNect charges farmers a fee if they require the enterprise to collect produce from farm gate and transport to end consumers.

Most enterprises that provide direct farmer-to-buyer links operate as for-profit businesses. They ensure sustainability and profitability by adopting differentiated pricing strategies, forecasting demand and generating sufficient demand.

It is important for enterprises to build trust with farmer communities and demonstrate the benefit of using a direct market platform to sell their produce. They work with farmer cooperatives, farmer societies, NGOs and rural government agencies to reach smallholder farmers. In addition, a number of enterprises partner with agro-input providers such as seed and fertilizer companies to reach small-scale farmers. services.

Results and Effectiveness

While direct-from-farm platforms are nascent and are yet to scale, they have been able to deliver significant impact to farmers in increasing their market access in comparison to traditional models. Direct-from-farm services enable farmers to realize maximum farm-gate prices by eliminating middlemen in the long supply chain. The model has also helped farmers reduce post-harvest wastages. Dialog Telekom’s model has enabled farmers in Sri Lanka to increase incomes by 40 percent due to elimination of middlemen.

Enterprises buy farmers’ entire harvest, regardless of the grade, and then sell it at differentiated prices to end customers. Under the traditional model, smallholder farmers sell their produce to agents who transport it to market yards. Direct-from-farm platforms allow farmers to sell such produce too and cuts down on the number of intermediaries, thereby boosting farmers share of the final price.

Enterprises have also contributed to creating other positive impacts on the lives of small-scale farmers besides enabling them to earn higher incomes. For instance, Kuchara, an online marketplace connecting farmers with buyers in Peru allows consumers to buy subscriptions to crowdfund education of future farmers, in exchange of long-life discounts on their purchases.