

Research and innovation

The Global Forum on Agricultural Research (GFAR) brings together all those working to strengthen and transform agricultural research for development around the world. As part of this role, GFAR is working with New Agriculturist to showcase and raise awareness of important initiatives and their outcomes, to update and inspire others.



Linking farmers to markets

While smallholder farmers may be highly skilled in crop and livestock production, marketing their produce frequently poses a very different set of challenges. In this edition, GFAR highlights how farmers in Bangladesh have overcome ethnic and geographical marketing obstacles, while Honduras cocoa farmers have organised themselves to supply a niche market in Switzerland. And experiences from Kenya show how boosting the business skills of both farmers and buyers has strengthened the weakest link in the country's cotton marketing chain.

Niche market for Honduras cocoa

The superior genetic quality of Honduran cocoa, which makes it perfect for high value confectionery, has prompted a partnership between 700 smallscale farmers and Chocolats Halba, a Swiss chocolate-maker. As a result, Honduran chocolate can be found on the shelves of one of Switzerland's biggest retailers, and farmers are, for the first time, benefiting from having a direct link to international buyers.

Making markets work for women in Bangladesh

Tribal women from Bangladesh's Chittagong Hill Tracts have used market surveys, improved negotiation skills and donkey transport to transform their engagement with high value fruit and vegetable markets.

Linking smallholders to buyers: the inclusive business model approach

The adoption of the value-chain approach over the past decade has provided a broad framework for supporting smallholder-market linkages through improved value-chain partnerships. Building on this approach, more recent efforts have focused on 'inclusive business models' which focus on the weakest link in many value chains, the smallholder to first buyer linkage.

Niche market for Honduras cocoa



Honduran cocoa farmers are benefiting from having a direct link to international buyers
©Helvetas

While Honduras and the wider Mesoamerican region are thought to be the cradle of cocoa, production in the region is tiny in the global context. However the superior genetic quality of Honduran cocoa, which makes it perfect for high value confectionery, has prompted a partnership between 700 smallscale farmers and Chocolats Halba, a Swiss chocolate-maker. As a result, Honduran chocolate can be found on the shelves of one of Switzerland's biggest retailers, and farmers are, for the first time, benefiting from having a direct link to international buyers.

Cocoa production in Honduras is almost exclusively in the hands of smallscale farmers managing plantations of two hectares or less, mostly along the northern coast. Roughly 1,500 farmers in Honduras depend on cocoa as their main source of income, but finding a direct link to foreign markets has been a major challenge. Most farms are located in remote areas and education levels among farmers tend to be low, hampering communication with potential buyers in Europe. And while some larger farmer associations, such as the Honduran Association of Cocoa Producers (APROCACAHO), have had the skills to negotiate on international markets, small associations have struggled, often suffering from poor management and internal organisation.

Cocoa cooperation

In 2007, Helvetas, a private organisation for development cooperation in Switzerland, invited Chocolats Halba - a subsidiary of Coop, a major Swiss retailer - to join a pilot project to bring Honduran chocolate to Swiss consumers. Over the next two years, the project established direct links between the Swiss company and four farmer associations, whose 700 members were trained in improved, organic farming practices and fermenting and drying procedures.



Four farmer associations were trained in improved, organic farming practices and fermenting and drying procedures
©Hondudiario

Project partner, APROCACAHO, carried out training through Farmer Field Schools, with the Honduran Foundation for Agricultural Research providing expertise in improved, environmentally sustainable cocoa-agroforestry systems. Other project partners included PYMERURAL, a regional programme for the competitive development of small and medium sized rural enterprises, and the Tropical Agricultural Research and Higher Education Centre (CATIE), which supported the training process through its Central America Cocoa Project.

Joining the project was an attractive option for the Swiss manufacturer, in expressing its corporate values as well as accessing high quality cocoa beans. Direct links between farmers and the cocoa industry are rare, with trade boards managing sales in major producing countries such as Ghana and Cote d'Ivoire. As a result, cocoa farmers tend to be very disconnected from the value chain. For Chocolats Halba however, being able to trace its cocoa back to the originating farms was important, making the supply chain more transparent and allowing the company to confirm its support for developing country farmers and environmentally sustainable farming.

Going for certification

By 2011, a second phase of the project started, training the farmers and their associations in the required procedures to achieve organic certification and Fairtrade labelling. This includes production, post-harvest management, marketing and other administrative aspects, which, for sustainability, must be achievable in the long term by the farmers with minimal external support. Other developments in the second phase include a financial guarantee fund, which is enabling farmers to invest in organic production, thereby increasing the incentive for them to engage in the certification process. Planting of fruit and hardwood trees, including mango, rambutan, avocado and mahogany, within cocoa plantations has also been encouraged, to provide additional income and a retirement fund.



APROCACAHO provided expertise in improved, environmentally sustainable cocoa-agroforestry systems
©Ingrid Fromm

According to Rene Fajardo, President of Cooperativa San Fernando, one of the four associations, the project has brought significant gains for the farmers. "The quality requirements are high, but we've had the opportunity to learn and improve our cocoa drying and fermenting processes, as well as our

administrative skills." Creating the supply system has required significant work from many parties, training the farmers, building partnerships with local institutions, and creating contracts and trade agreements. That investment, however, seems to be paying off. Farmers are now incorporating new knowledge that is helping them produce cocoa in a sustainable way, and have gained both a secure buyer and a better income for their cocoa beans. Chocolats Halba has, meanwhile, gained a high quality, fully traceable supply of cocoa that meets its social and environmental targets.

Links

- Helvetas (<http://www.helvetas.org/>)

Written by Ingrid Fromm, Bern University of Applied Sciences

Making markets work for women in Bangladesh

The Chittagong Hill Tracts (CHT), a mountainous area bordering Myanmar and populated by Bangladesh's ethnic tribal population, has a more temperate climate than the rest of Bangladesh, and fertile land at a variety of altitudes, so it is uniquely positioned for diverse, year-round agricultural production. Women here are largely responsible for farming, practising *jhum* (traditional slash and burn agriculture) on communal plots. Until recently, ethnic exclusion and geographic isolation have hampered tribal women in accessing markets, which are typically controlled and dominated by Bengali traders. But through a series of innovations, including market surveys, new cultivation techniques and donkey-based transport, 450 tribal women have become part of a successful value chain for high value vegetables and spices, resulting in a nearly four-fold increase in monthly income and improvements in food security and nutrition.



Donkey-based transport has helped 450 women market vegetables and spices
©HKI

Improving the women's understanding of the market was a key first step. Under a project implemented by Helen Keller International (HKI), and funded under a DFID/Government of Bangladesh-supported 'economic empowerment of the poorest' programme, 45 women group leaders carried out market surveys before the start of each growing season over a three year period (2009-2012), to identify products likely to yield the most profit. This involved visiting district-level markets and interviewing input suppliers, shopkeepers, consumers and other market actors using a standardised survey format; project staff helped to facilitate these meetings, to overcome any ethnically-driven reluctance.

Learning from the market

Surveys with vegetable sellers, for example, revealed a scarcity of fresh vegetables, which vendors frequently purchased from farms more than 600 kilometres away; restaurants reported that except for *hat* (bi-weekly market) days, they could not obtain sufficient vegetables. With this information, female farmers were able to target what they should grow, knew what price to demand from buyers, and focused on supplying vegetables on days when the *hat* was closed.



Surveys with vegetable sellers provided women with information on what they should grow
©HKI

This planning represented a dramatic departure from traditional cultivation strategies, when the same products were grown year after year with no awareness of expected price. "Conducting the survey every season was key," explains HKI Marketing Specialist, Nazmul Huda. "Through interviews with the major buyers of spices, female farmers found that though turmeric was highly profitable in 2010, its price halved in 2011 and 2012. At the same time, the price of ginger and taro increased. The market survey meant women knew this in advance and could plan seed purchase."

Since the 1960s, state-sponsored migration and land acquisition have created land shortages. As tribal populations were pushed further into the hills, population pressure dramatically depleted soil quality and reduced production. HKI introduced contour farming techniques to cultivate products prioritised by market surveys, producing higher yields and reducing input costs, particularly for water and fertiliser. Contour farming required a large input of labour upfront, but once earthwork was completed, labour inputs were reduced and larger plots could be cultivated. This saved the time women used to spend walking to scattered *jhum* plots, enabled them to pool resources and facilitated group marketing of produce.

HKI also trained women farmers on post-harvest handling and processing techniques and arranged visits with vendors and buyers to observe which traits brought the highest value. At the most basic level, women were able to improve the presentation and subsequent sale price of fresh fruits and vegetables through sorting, cleaning and grading. In other cases, equipment and advanced training enabled women to produce processed spices, pickles, jams and jellies.

Overcoming barriers

Horticultural markets are far from the hill areas where tribal populations live. To address geographic barriers, HKI introduced donkeys to female farmer groups living and farming far from roads. Trainers from the Donkey Sanctuary in India were brought in to train local veterinarians to provide medical care and instruct female farmers on care and feeding. Once their care was established, the donkeys significantly saved on labour needed to access markets, as a selected 'market middle-woman' in each group could use the animal to transport produce from several female farmers. This was key in marketing fruit and vegetables, which are prized for freshness.



HKI trained women farmers on post-harvest handling and processing techniques
©HKI

Social and ethnic barriers required multiple strategies. While market surveys provided supply and demand information, which enabled women to negotiate on more equal terms with traders, HKI also provided intensive training on marketing skills, such as determining sale price, negotiation and bookkeeping, and helped women negotiate directly with market committees to gain dedicated space for sale. Workshops organised with vendors and buyers further helped middle-women develop business networks and identify niche buyers. While such organised events may not continue beyond the end of the project, the relationships made with vendors and buyers, often outside their ethnic group for the first time, are expected to persist. Vendors and buyers appreciate the role of tribal women in the agricultural value chain, making sizable input purchases (particularly when they work as a group), and supplying products with high market demand.

Written by Erica Roy Khetrin, Country Director-Bangladesh, Helen Keller International

Linking smallholders to buyers: the inclusive business model approach



In Kenya, the IBM approach was implemented in support of the cotton sector
©FAO

The adoption of the value-chain approach over the past decade has provided a broad framework for supporting smallholder-market linkages through improved value-chain partnerships. Building on this approach, more recent efforts have focused on 'inclusive business models' which focus on the weakest link in many value chains, the smallholder to first buyer linkage.

FAO, in partnership with local governments and partners, has been at the forefront in implementing the inclusive business model (IBM), which has been piloted in 16 countries across Africa, the Caribbean and the Pacific, with the support of the EU. This quick-start approach helps to identify context and commodity-specific solutions to local market obstacles. A cornerstone of the approach is to maintain focus on

improving competitiveness through win-win solutions for the smallholder-to-buyer linkage rather than addressing the individual agenda or concerns of either actor.

Experiences from the cotton sector in Kenya

In Kenya, for example, the IBM approach was implemented in support of the cotton sector, focusing on building the commercial linkages between cotton cooperatives and ginners. Implemented between 2008-2010 in the cotton growing districts of Siaya and Nambale with the support of a local NGO, Farm Concern International (FCI), the project worked with 15 cooperatives, representing 18,000 smallholders, and four ginneries, and centred around four main areas of intervention.

For the cotton cooperatives, ten training modules were developed and delivered by FCI, covering various technical and managerial skills, to improve farmers' ability to reliably deliver good quality cotton to ginneries. Ginnery owners and managers were trained in modern business practices, including contract management and negotiation, logistics and operations management, financial management and marketing and sales. Financial service appraisals were also carried out, to identify potential sources of public and private sector funding for both cooperatives and ginners.

Lastly, the project facilitated business seller-buyer forums to find solutions to grievances and bottlenecks between the parties. Late payment for cottonseed by the ginners had been a long-standing issue, frequently leading to side-selling by farmers. With the support of local financial service providers, shorter payment periods were agreed, with payments made directly into accounts held in district financial institutions. Through the forums, cooperative staff recognised the need to work with ginneries rather than in opposition to them, in order to tackle competition and market obstacles together. Farmers also came to realise the importance of bulking their cotton, both for their own bargaining power and to reduce buying and selling costs for themselves and the ginners.



The project facilitated business seller-buyer forums
FAO

While production inputs were not provided to farmers and increasing production was not a primary objective of the intervention, a marked increase in the acreage of cotton production did occur. This appears to have been caused by the newly trained cooperative staff making significant improvements to the services provided to their members. This included organizing collection points and transport to help with cottonseed bulking, training in post-harvest practices and the introduction of a quality control system from farm up to the point of delivery. Cooperatives staff were also better able to negotiate credit, to help farmers with the purchase of inputs. The increase in production also had knock-on efficiency benefits for the ginneries, which typically struggle at 20-50 per cent below full potential.

Lessons for the public sector



Through forums, cooperative staff recognised the need to work with ginners rather than in opposition to them

The overarching lesson from the implementation of the IBM approach is the important role that small and medium agro-enterprises (SMAEs) - such as the cotton ginners - play in providing smallholder-based organisations with reliable markets but without the high standards demanded by more commercial buyers. Their ability, however, to support the integration of smallholders in value chains is limited. Firstly, the risks of doing business with smallholders are considerable, ranging from inconsistent quality and quantity of supply to side-selling. Secondly, they struggle to provide the technical and financial assistance needed to bring smallholders' produce up to a standard which satisfies the market. Thirdly, both small buyers and farmer organisations are restricted by red-tape and taxes, which limit the level and ease of business between them.

Donors and NGOs can address the first two challenges, but public policy can go much further by introducing reforms that abolish over-bureaucratic rules governing the institutional, legal and administrative frameworks of both small businesses and membership based organisations. In addition to contributing to a general easing of doing business at the local level, such reforms will also play an important part in reducing many of the costs and risks faced by SMAEs when doing business with small farmer-based organisations.

Written by Siobhan Kelly, Agribusiness Economist, Rural Infrastructure and Agro-Industries Division of FAO