



**USAID**  
FROM THE AMERICAN PEOPLE

**BEST PRACTICES IN IMPLEMENTATION  
PAPER SERIES**

# THE FARM-TO-MARKET VALUE CHAIN APPROACH

**LINKING SMALLHOLDERS TO WAL-MART IN HONDURAS**

**microREPORT #139**

**JANUARY 2009**

This publication was produced for review by the United States Agency for International Development. It was prepared by Elizabeth Painter of Fintrac under contract to ACDI/VOCA with funding from the Accelerated Microenterprise Advancement Project.

# THE FARM-TO-MARKET VALUE CHAIN APPROACH

**LINKING SMALLHOLDERS TO WAL-MART IN HONDURAS**

**microREPORT #139**

## **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

## EXECUTIVE SUMMARY

Fintrac, through programs funded by the United States Agency for International Development (USAID) and the Millennium Challenge Corporation (MCC), started implementing its farm-to-market value chain approach in Honduras in 2000. The following case study highlights sustainable, systems-focused technical support for smallholders linked with Wal-Mart (registered as Hortifruti in Honduras) and other buyers.

Before working with Fintrac, Wal-Mart relied on imports to supply about 80 percent of produce for its Honduras stores. The remaining 20 percent was obtained from large farms and local markets in Honduras. Supply quantity and quality, however, were inconsistent, and traceability was a concern.



**Jalapeño Peppers for Export**

Fintrac worked with Wal-Mart to assess needed crops, volumes, delivery requirements and quality specifications and organized lead growers and outgrowers for a calendarized production program for 20 different crops. Currently about 100 farmers supply Wal-Mart/Honduras and other regional stores with more than 60 percent of their produce needs generating \$780,000 in new farmer sales yearly. They are also exporting products including sweet potatoes, herbs and tomatoes to El Salvador, Nicaragua, and Costa Rica.

Three out of eight key features of the value chain approach<sup>1</sup> as articulated and promoted by USAID's Microenterprise Development office (USAID/MD) provide a lens for viewing and analyzing Fintrac's programmatic approach. A market system perspective, recognition of the importance of relationships, and facilitating changes in firm behavior each address similarities and differences between USAID's and Fintrac's value chain approach.

## A MARKET SYSTEM PERSPECTIVE

Fintrac's technical approach starts with analyzing the farm-to-market value chain in targeted production zones, allowing us to identify areas of deficiency and to craft market-led, client-driven technical interventions focused on strengthening the weak links in the chain. This involves analyzing prices, volume data and activities/operations at each point on the value chain, taking into account the relevant cost factors (inputs, labor, transportation, etc.) and returns on produce marketed by client farmers. This information is weighed against the potential increases in volumes sold and prices realized from improvements in production yields, product quality, postharvest infrastructure, market diversification and other areas. Following the analysis, investment needs are identified and technical interventions are designed to upgrade activities and improve returns at different points along the chain, including:

- **Production:** Enabling farmers to respond to market demand by diversifying their product offerings, improving quality and supply dependability, and increasing volumes sold, while simultaneously lowering unit production costs and boosting revenues through the introduction of improved, low-cost technologies and sustainable farming practices.

---

<sup>1</sup> See "Key Elements of the Value Chain Approach" Briefing Paper  
[http://www.microlinks.org/ev.php?ID=24002\\_201&ID2=DO\\_TOPIC](http://www.microlinks.org/ev.php?ID=24002_201&ID2=DO_TOPIC)

## **KENYA VALUE CHAIN APPROACHES**

In East Africa, Fintrac has been applying the farm-to-market value chain approach with client groups in Uganda, Kenya, Ethiopia and Tanzania. Since 2004, as implementing contractor and sub-contractor respectively for the USAID-Kenya Horticulture Development Program, Fintrac and Market Economies Development Ltd. (MED) (Kenya) have conducted value chain studies and managed strategic technical interventions for many of the major horticulture crops grown in Kenya, including cabbages, tomatoes, onions, potatoes, sweet potatoes, French beans, chili, mangoes, passion fruit, cashews and aloe vera. In 2007-08 Fintrac provided technical support for all research and analysis leading to the HCDA Horticulture Data 2005-2007 Validation Report. This report reviewed, compared and revised national production data from all available sources including: MOA annual extension reports; horticultural seed sales by major distributors; yields of major crops recorded by KARI; urban market price reports; export records from HCDA, KEPHIS and KRA; and a range of crop and region-specific reports from other stakeholders in the horticulture industry. The final report provides a baseline and makes recommendations for improved systems for data collection and analysis planned to begin in 2009. MED and Fintrac were also contracted by the Ministry of Agriculture in 2008 to carry out a study on Innovative Agricultural Extension Service Models. The study researched and highlighted the types of technical services currently provided to smallholders by private sector companies, many of which relate to the horticulture sector.

- **Postharvest handling and distribution:** Reducing product losses after harvest by establishing storage and collection centers to enable farmer groups to maintain the quality of their produce, and by implementing other best practice postharvest practices.
- **Marketing and logistics:** Facilitating marketing arrangements between smallholder groups and private partners such as wholesalers, processors and exporters, which lead to increases in volumes sold. Such arrangements often involve the provision by these partners of inputs, market information and technical assistance to their farmer suppliers, in return for their assurance of receiving consistent quality and supply. The result is the increased integration of smallholder suppliers into the farm-to-market value chain.
- **Agribusiness service providers:** The value chain analysis includes a focus on availability of inputs and services in targeted production areas. Bringing agricultural service providers into the fold is a key element of Fintrac's approach to providing extension and other information through embedded technology transfer mechanisms.

Fintrac's integrated approach leads to the identification and removal of critical constraints at different points along the chain, constraints that ultimately prevent farmers from realizing higher sales and incomes.

Before beginning agribusiness development programs in Honduras in 2000, Fintrac worked with partners to pinpoint constraints to competitiveness. Fintrac found that while there was limited availability of or access to inputs, weak market linkages, and limited access to technical, business, and financial services, the main constraint to competitiveness was the ability of farmers (especially smallholders) to produce what the market demanded. Locally grown produce was, for the most part, characterized by low quality and inadequate supply.

## **RECOGNITION OF THE IMPORTANCE OF RELATIONSHIPS**

After meeting with Wal-Mart/Honduras to assess crop, volume, and delivery requirements, and quality specification needs, Fintrac focused technical assistance to producers to create supply programs driven by Wal-Mart requirements.

This entailed continuing efforts to change production practices, create business plans and provide links between farmers and input suppliers and financial institutions to achieve results.

## CHANGING PRODUCTION PRACTICES

To ensure that Fintrac could find producers, spread good agricultural practices, and scale-up production for Wal-Mart and other buyers, technicians employed the lead farmer approach. The lead farmer approach entails identifying farmers in a community that are immediately willing and able to implement technical recommendations and production techniques and persuade and assist neighboring farmers in upgrading their production systems.

As lead farmers adopt good agricultural practices, they improve yields and sales. In this case, lead farmers were also connected to a new buyer of their produce, Wal-Mart, which usually pays farmers more than the going rate for produce that meets their standards.



**Raised beds and calendarization are used on a carrot farm in Honduras.**

Neighboring farmers that may have been reluctant to adopt new technical recommendations get involved based on the success of the lead farmers. When beneficiary farmers can see that lead farmers are benefitting from Fintrac technical assistance, they seek technical assistance, upgrade their production systems and sell their produce to Wal-Mart and other buyers.

“The recommendations of the technicians have changed the way I grow [crops] and have given me great results. Before I was producing 28,000 kilos per hectare and now I’m producing 84,000.” *Gustavo Quiroz, USAID-RED Client and Wal-Mart Supplier, La Guama, Santa Cruz de Yojoa*

Lead farms also serve as a meeting place for in-field, hands-on technical training sessions. Trainings are organized on a case-by-case basis based on the needs of individuals and groups of producers. To ensure optimum technical support, technicians generally maintain continuous contact with lead and beneficiary farmers via phone and in-person farm visits. Lead farmers also assist in providing technical assistance to beneficiary farmers.

The most important technical changes that Fintrac facilitated were calendarization, crop diversification, and the introduction of Good Agricultural Practices (GAPs) including drip irrigation and Integrated Pest Management (IPM) for each crop. These changes enabled producers to organize year-round production of the products Wal-Mart and other buyers demanded.

To establish quality standards, Fintrac provided guidance to Wal-Mart/Honduras and producers in certification and quality standards established by GLOBALGAP, a private sector body that sets voluntary standards for the certification of agricultural products around the globe. The GLOBALGAP standard is primarily designed to reassure consumers about how food is produced on the farm by minimizing detrimental environmental impacts of farming operations, reducing the use of chemical inputs and ensuring a responsible approach to worker health and safety as well as animal welfare. It is the most used agribusiness industry standard in the world.

As Fintrac assisted producers in obtaining GLOBALGAP certification, they gained credibility with Wal-Mart and other buyers. Wal-Mart gained assurance that the products they were buying from producers and selling to consumers met the highest industry standards in the business.

## PROVIDING LINKS

In the process of changing production practices to achieve results, Fintrac facilitated communication flows between input suppliers, producers, and Wal-Mart about new seed varieties for crops including bell peppers, tomatoes and carrots grown for Wal-Mart, cost-effective materials for drip irrigation systems, soluble fertilizers and pesticides (newer less-harmful chemicals demanded by Wal-Mart). As a result, input suppliers started carrying these products and producers have access to the products necessary to upgrade and/or maintain their production systems.

Fintrac also worked with the Escuela Agrícola Panamericana (EAP) Zamorano to scale-up production of biological controls such as trichoderma to sell to farmers. Fintrac promotes biocontrols such as trichoderma, which is a natural fungus that fights harmful fungi, in our Integrated Pest Management (IPM) approach. Wal-Mart producers continue to buy trichoderma from Zamorano.

In addition, Fintrac facilitated farmers' access to credit and finance by negotiating lower interest rates with local banks and persuading them to provide loans to farmers. The majority of local banks in Honduras now gladly provide credit to farmers who can prove they are or were Fintrac clients. Fintrac clients were also trained in business skills including business planning and recordkeeping for costs and sales to ensure long-term sustainability and profitability.

Linking producers with Wal-Mart and other buyers while identifying and ameliorating technical gaps enabled producers, buyers, and input suppliers to become and remain competitive. Not only did Wal-Mart improve product sourcing and flows but it developed the capacity to define, communicate, and enforce product quality standards. Similarly, producers gained from selling their produce directly to Wal-Mart and developed the capacity to use their knowledge of good agricultural practices to adapt to new requirements and demands and share information with other growers. In addition, communicating with and integrating input suppliers into the program ensured that input suppliers would remain competitive and in touch with the needs of their customers, and that producers could obtain the materials (and knowledge) necessary for upgrading and adjusting their production systems to meet buyer product requirements.

“We’ve made a good team with CDA, RED, and EDA. We’ve succeeded in incorporating Honduran farmers [into the value chain] and convincing them that agriculture is a good business.” *Juan Ramón Fúnez, Supply Manager, Hortifruti*

Wal-Mart and their producers do not only have GLOBALGAP-based protocols in place to ensure quality standards but, because of their direct buyer/seller relationship, can communicate with one another about how to solve product quality problems. Producers sell directly to Wal-Mart buyers, who are also agronomists that can advise them (producers) what to do about production problems that affect sales. Once farmers are trained in good agricultural practices, and linked with input suppliers, finance, and other related business development service providers, they can scale-up production, diversify crops, and adapt to changing market demands.

“I am 42 years old and my life has been growing vegetables. I am selling to the local market and Hortifruti [Wal-Mart Honduras]. Many times before I could not harvest a single celery leaf due to alternaria disease problems. Now with the assistance I am receiving from USAID-RED, I have the knowledge to control pests and diseases. I am also using the agricultural practices that I have learned with celery production for my parsley and spinach crops.” *Regino Ramirez, USAID-RED Client and Wal-Mart Supplier*

“Regino is one of our best producers with supply and he is quick to implement best practices for production and handling of the products.” *Marcos Salas, Purchasing Manager, Hortifruti (Wal-Mart Honduras)*

## **EMPOWERING STAKEHOLDERS AND ADDRESSING THE ENABLING ENVIRONMENT: UPGRADING THE PESTICIDE REGISTRATION DATABASE IN HONDURAS**

Fintrac-implemented USAID-RED initiated support to SENASA in 2006 after experiencing difficulties in obtaining basic pesticide, fungicide and fertilizer information needed to certify farms with exporting capabilities. The activity included digitalization of all registered pesticides into a web-based database, verification of all registered pesticide information, development of manuals and standard operating procedures, and staff training for those responsible for updating the database. The activity provided the first current, standardized and easily accessible information on pesticides registered in Honduras, providing the public with real-time information on registration status and thereby facilitating national food production through compliance with international standards and regulations.

## **FACILITATING CHANGES IN FIRM BEHAVIOR**

In the value chain approach outlined above, Fintrac works with catalytic firms including producers, buyers, input suppliers, financial institutions, and other related business development service providers to increase the competitiveness of the chain. Training producers while working with buyers, input suppliers, and others is key to facilitating changes in firm behavior.

Linking agronomists with producers through the lead farmer approach demonstrates the potential of upgrading production technologies to surrounding farmers, reduces the risk to producers investing in upgrading through corresponding technical assistance, and accelerates the scaling up of the initiative. When beneficiary farmers can see that lead farmers are benefitting from Fintrac technical assistance, they seek technical assistance, upgrade their production systems, and increase sales. Lead clients assist with providing technical assistance to beneficiary farmers. Once farmers can begin producing the type, quality, and quantity of produce that buyers desire, buyers almost always ask for increased quantities and for production of related crops.

It is important to note that Fintrac technical assistance is systems-focused. Systems of production are those processes that take place in an organized manner to achieve the desired results; in this case, operations or agricultural businesses that generate income. Many other agribusiness programs focus on specific crops forgetting that the producer must be able to diversify production to achieve optimum results. Systems-focused assistance puts producers in a better position to sustain production technologies for various crops and adapt to market changes in the long run. Preliminary results from a random sample of all Fintrac clients in Honduras prior to 2006 indicates that the vast majority of Fintrac clients earned sustainably more income after graduating from Fintrac technical assistance programs than before their work with Fintrac.

Another important characteristic of Fintrac technical assistance programs is that all Fintrac agronomists are hired locally. Occasionally, other technical experts in areas such as plant nutrition and integrated pest management are hired on a short-term basis. Hiring local agronomists contributes to the growth and development of a robust private technical assistance sector in-country.

Fintrac agronomists also train others, including interns from university agronomic programs, and agronomists from counterpart NGOs, government agencies, and private-sector partners. However, NGO and government agronomists are often dependent on donor and public sources of funding, which are not always reliable. In addition, while training



**Regino Ramirez in his Celery Field,  
Soroguara, Francisco Morazán, Honduras**

buyer company agronomists is a successful and sustainable way of ensuring that farmers maintain their levels of technology, expand area, and diversify production, it is important to recognize that technical assistance provided by buyer agronomists will be geared toward the needs of the end buyer, and not the producer. Similarly, staff from input suppliers that are trained to provide embedded extension services will be more focused on sales of its products.

In Fintrac's experience, smallholder producers cannot and do not pay for technical services, and especially if they've never received technical assistance before. Some medium and large producers pay and contract specialized short-term assistance to resolve problems and introduce new crops and technologies. But the reality is that the provision of technical assistance to small and medium producers is generally a public service and that long-term, nationally-focused funding must be dedicated to this purpose to continue upgrading systems of production.

### **TECHNICAL ASSISTANCE WITH AN EXIT STRATEGY: CHESTNUT HILL FARMS**

In late 2000, Fintrac, through the USAID-funded CDA program, set up an independent grower outsourcing program for Chestnut Hill Farms, a major Honduran processor of jalapeños. Participating growers implemented the required production technologies to profitably grow jalapeños, and the commercial relationships and confidence between the buyer and the growers are now sufficiently developed to ensure continuity. In June 2004, Fintrac transferred the program to Chestnut Hill Farms, who is now providing all of the services previously handled by Fintrac including technical assistance to growers, establishment of planting schedules, logistical coordination, and quality control. In 2004, 69 growers delivered more than 13 million pounds of jalapeños with a sales income of \$2.2 million. These sales provided on farm employment to an equivalent of 300 permanent positions.