

### microNOTE 46

# Upgrading in the Ataulfo Mango Value Chain in Chiapas

**BACKGROUND** 

This microNOTE, based on a comprehensive value chain assessment, provides an overview of the Ataulfo mango value chain in Chiapas, Mexico. The note describes chain dynamics and identifies opportunities for upgrading, including the potential to leverage well-designed financial services.

#### in Mexico, as well as a growing market for Ataulfo mangoes abroad.

STRENGTHS

these trends.

The Chiapas Ataulfo chain has important strengths upon which to build. The variety enjoys a high degree of market demand accompanied by higher prices, especially in the organic niche which enjoys a 30% premium above conventional Ataulfos. The Ataulfo was first discovered in and is most identified with the Soconusco region in Chiapas, around Tapachula and the Guatemalan border.

Global mango consumption has grown steadily in recent years, both in producing and importing countries. Mexico has been one of the main

worldwide. Within an increasingly commoditized environment, the

gold-colored Ataulfo mango from Chiapas (unlike the more common

red or Florida varieties) has sustained a differentiated identity and a price premium in both domestic and export markets. Although

Chiapas occupies a relatively minor place in overall Mexican mango production and exports, it leads both in production and exports of the Ataulfo variety and, as a whole, is well positioned to take advantage of changing market dynamics, such as the growth of supermarket chains

The largest integrated grower/packers are clearly best positioned for

producers and consumers of mango, and a leading exporter

The region is among the first areas to begin production each cycle precisely when the southern hemisphere competitors are winding down but before other regions in Mexico begin to harvest, permitting fruit to enter the market while stocks are low. The Soconusco also

September 2008

This publication was produced by Nathanael Bourns of DAI for the U.S. Agency for International Development.

U.S. Agency for International Development www.usaid.gov

meets phytosanitary requirements for accessing US markets (the world's largest mango importer), although this requires constant effort and coordination across the sector and cannot be taken for granted. Other strengths include public sector support in the form of programs for supporting credit, irrigation, and organic conversion, among others.

#### **CHALLENGES**

Despite this privileged position, the chain faces a series of challenges. First and foremost is declining productivity, for which basic scientific research is necessary. While any of a range of factors may cause productivity declines under a given set of circumstances, the necessary scientific studies have not been conducted and disseminated to improve yields. One result of this uncertainty is a reduced propensity among chain actors, especially producers, to invest in upgrading.

Other challenges also revolve around the need for easy access to better, more timely information. The chain would benefit from improved market information, including regular pre- and post-harvest production estimates and data, regular tracking of flows of fruit from orchards to packing plants to markets, and regular tracking of prices in the main domestic and international markets. Such information would support decision-making based on factual market appraisals, rather than



Ataulfo producer/packer/exporter Jesus Garcia, shows researcher Patrick Hanemann good productivity on trees nearly ripe for harvest.

hearsay. The chain also needs an updated set of agricultural practices for the Ataulfo variety in the Soconusco and, in light of growing demand, a new set of agricultural practices for organic Ataulfo.

## ROLE OF FINANCIAL SERVICES

Once some of these basic needs are met, appetite for investment is likely to increase and the current lack of formal financial services may amount to a major constraint. Conventional credit relationships with private commercial banks are no more common for Soconusco Ataulfo growers or packers than for other agricultural activities in Mexico. The most common variation of formal financial services observed involved government-backed and subsidized (FIRA) lending from

commercial banks that tend to concentrate on the largest companies, particularly packing houses which may in some cases on-lend to certain producers. In such cases, financial institutions take very little risk, use none of their own capital, and obtain operational subsidies. A bank's ability to measure and manage agricultural and business risks and costs is therefore considerably less relevant than its ability to understand and manage the subsidy scheme.

Trade credit, which was found to flow both from suppliers to buyers and vice-versa at different points in the season, has important benefits, including the simple fact that it often exists as an option where services from financial institutions do not. But it also has drawbacks in terms of limiting choices, or suboptimizing commercialization



Naturafruit Packing House export selection and packing line.

and other decisions throughout the chain. Liquidity, or lack thereof, often determines the channel into which Ataulfos from the Soconusco are sold. While this is common for capital-constrained producers who access the quick payment terms (but lower prices) of local intermediaries, it was also observed among packers that sometimes base channel strategies more on whether or not they require extending credit to their producers, than whether they are optimal channels, preferring to remain in channels where they don't need to use their scarce capital to finance the producers, regardless of the market opportunities in that channel. In this sense, understanding trade credit and the flow of information through the chain offered insights into the nature of commercial relationships through the chain, as well as the

potential for mutually beneficial improvements.

#### **OPPORTUNITIES**

Upgrading opportunities identified in the value chain analysis and confirmed through a participatory workshop with a diverse group of value chain actors include:

#### **Production**

 Research root causes of productivity declines and mitigation approaches.
 Based on findings develop and disseminate a set of recommended Ataulfo agricultural practices.

- Develop organic-specific recommended agricultural practices for Ataulfo in Chiapas for producers interested in doing so to obtain benefits of excellent market opportunities for organics
- Develop certification process for Ataulfo nurseries to mitigate a source of reduced productivity.
- Examine the potential for enhanced irrigation techniques, especially lower cost approaches, in terms of their contribution to productivity, quality, and returns to growers.
- Given the environmental importance of the Soconusco region, work with environmental specialists to evaluate production and identify strategies to address biodiversity threats.

#### Commercialization

 Given its attractive characteristics for juice and pulp and the lack of such channels in the Soconusco, support chain actors to examine business cases for different investment scenarios.  Improve information and transparency along the chain, starting with the fieldlevel data and following product flows to market, in terms of pricing, inventories, and competitive conditions.

#### **Finance**

- Assist financial institutions
  to serve this potentially
  attractive niche, by helping
  them understand chain
  dynamics including costs,
  returns, and risk, in order to
  design appropriate financial
  services. Designs should
  build on lessons learned in
  value chain finance (e.g.,
  structuring repayment
  schemes through buyers)
  and in microfinance (e.g.,
  including household cash
  flows in credit analyses).
- Help research the feasibility
   of long-term finance for
   investment and upgrading
   for multiple actors in the
   chain, including growers,
   packing houses,
   cooperatives and growers'
   associations.
- Assist interested financial institutions to obtain and leverage rich information that packing plants and others have on producers that could support financial decisions.

#### **Public Policy**

- Enhance collaboration across public and private sector actors to improve the design and implementation of public policies and programs, especially in the areas of agricultural extension, finance, irrigation, environmental standards, and phytosanitary compliance.
- Work with stakeholders including government, the phytosanitary board and the producers' association to ensure that coordination across the chain on phytosanitary compliance continues to improve, ensuring continued access to US and other export markets.

Going forward, the USAID-funded AFIRMA project will work with the local fruit producers association, value chain actors, financial institutions, researchers, and government programs to support them where necessary in addressing identified constraints and priorities.



Organic Ataulfo Harvest, Tapachula

The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government