

The European and North American organic banana markets seem tailor-made for smallholder farmers but entering these markets is not without its own sets of difficulties, as INIBAP and its partners learned when they went down that road in South America.

The highs and lows of organic bananas in South America

Bolivian farmers are pushing up the quality of their bananas, using improved infrastructure such as packing stations and cableways
(A. Vezina, INIBAP).



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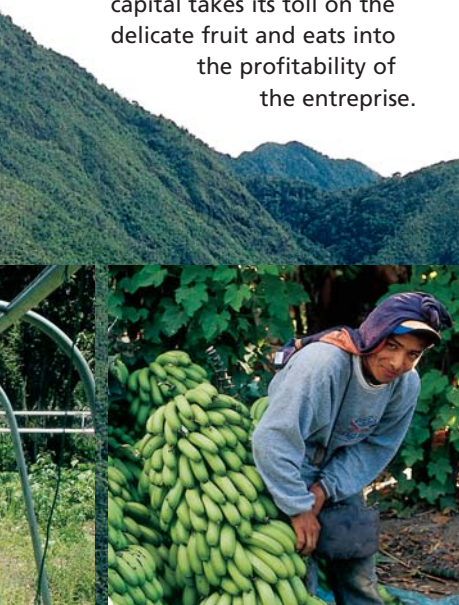
The road to La Paz
(A. Vezina, INIBAP).

“The road is killing us”, sighs Fernando Bohorguez, the manager of the Alto Beni organic banana project in Sapecho, Bolivia. Figuratively, that is. Although the road to La Paz does contain a narrow stretch overlooking a 1000-metre drop, Fernando is alluding to its impact on the bananas. Even with a two-lane gravel road set to replace the hair-raising section, the nine-hour trip to cover the 235 km to the high-altitude capital takes its toll on the delicate fruit and eats into the profitability of the enterprise.

The road is one of the reasons the project has yet to deliver on its original promise of exporting organic bananas from this mountainous landlocked country to the more lucrative, but finicky, markets of North America and Europe. The goal of improving the lives of Alto Beni farmers, however, has been attained, thanks to a good dose of realism. “The project is having a positive impact because it has adapted to the situation on the ground”, says Fernando. Instead of immediately competing with established organic exporters in international trade, the project has concentrated on fine-tuning the commodity chain in the domestic market and grooming the 10 producer

1000 fingers – coming down from La Paz with trucks to relieve them of their bananas. The farmers had no incentive to invest time and effort to nurture their plants and fight off diseases. “Before the project”, confirms Mario Choque Chamba, the executive secretary of the Alto Beni agro-ecological federation, “the farmers did not look after their banana plants. They would plant them and harvest the fruits, nothing more.” There was more to this attitude than strict economics. The majority of Alto Beni farmers migrated to the semi-tropical humid forests flanking the Beni river over the last 40 years. Most of them came from the altiplano, where land was becoming scarce because of population growth and where bananas

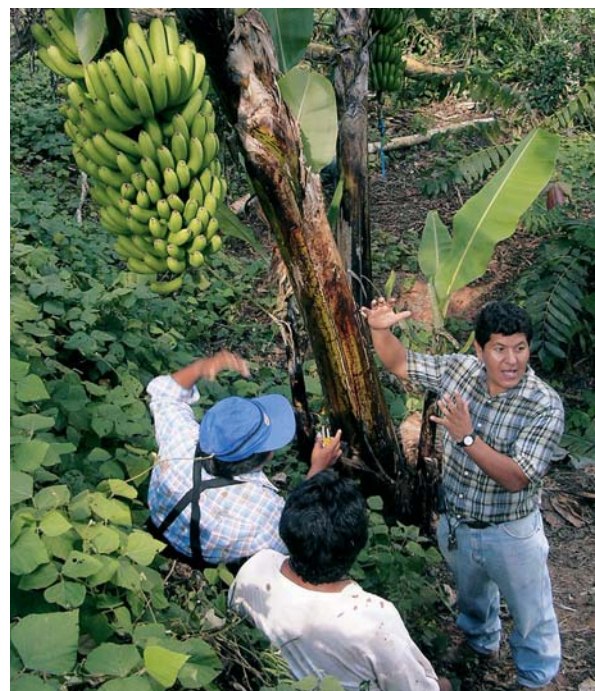
Conventional growers sell their bananas in chipas or 1000 fingers (left). Outreach material from the Alto Beni project (centre). The Beni river in Bolivia (right). Fernando Bohórquez explaining how to take care of a banana plant (lower right). (Photos A. Vezina, INIBAP, illustration R. Sosa Toledo).



associations, one for each participating community, to take over after the project is finished. By improving the quality of the bananas and reducing the costs of packing, transporting and conserving them, the farmers' income increased by as much as 73% in some cases.

Changing attitudes

Before the project, Alto Beni farmers had no choice but to accept the low prices offered by intermediaries – called *chiperos* because they buy the bananas in *chipas*,



do not grow. Unlike their African and Asian counterparts who inherit a wealth of knowledge on the cultivation of bananas, the Alto Beni farmers were not born in a 'banana culture'.

They did, however, react very sensibly to finding themselves in unfamiliar surroundings and disadvantaged by the rough terrain lying between them and their markets: they spread the risks by growing a variety of crops, many in mixed cropping systems. The banana is one of them because it provides a steady income until the fruit trees with which it is cultivated, mainly cacao and citruses, can be harvested. The farmers own on average 12 hectares, of which around 1.5 ha are for bananas. Ninety percent of the bananas are of the cultivar 'Grande naine'.

Lately, however, the banana plants started to sport the grey drooping leaves characteristic of black leaf streak disease, which entered the area in the late 1990s. Luckily for the 466 farmers participating in the project, not being able to afford chemical fungicides played in their favour when it was proposed that they should prime their bananas to compete in the organic market (see 'The organic banana and the smallholder').

The funds to support the conversion comes from the Inter-American Drug Abuse Control Commission of the Organization of American States (CICAD-OAS), which is part of a US-funded strategy to fight the illegal production of coca based on projects that help farmers grow legal crops instead. Since Alto Beni is

The organic banana and the smallholder

Selling organic bananas to health-conscious consumers in developed countries is at the forefront of efforts to help small-scale banana producers improve their livelihoods. For one thing, the market is still open to newcomers. The organic banana trade is a drop in the ocean compared to the 11 million tonnes of conventional bananas exported each year, but in contrast to the latter it keeps on increasing. It shot up from an estimated 29 000 tonnes in 1998 to 136 000 tonnes in 2002 and the forecast is for more growth. Nearly half of the production comes from the Dominican Republic, while Ecuador, Peru, Mexico and Colombia produce most of the remaining half.

Smallholders are also considered ideally suited to supply this niche market since they can rarely afford the chemical pesticides and fertilizers that are banned in organic agriculture. Other constraints, however, hinder conversion. Black leaf streak disease is seen as an important one. Areas that do not have the disease are currently at an advantage, but novel approaches being tested in areas of high disease incidence, such as Ecuador, are producing plants with healthy-looking leaves. The plants are fed a diet of liquid and solid organic fertilizers that incorporate a large variety of microorganisms, which are believed to induce the plant to deploy its defences.

The recurring cost of certification, which is beyond the reach of the average smallholder, is another hurdle. Producers overcome it by forming associations that spread the cost among their members or by signing an exclusivity contract with a marketing company that, in return for paying for the certification, buys their production at a fixed price. Smallholders also need help during the transition period in which production costs have risen because of the extra work but the sale price of bananas has not changed because the fruits are not certified. It can take up to 3 years to obtain an organic certification. When they are certified, the bananas fetch a better price, in part because consumers are willing to pay more but also because the demand exceeds the supply. The fear is that the price for organic bananas will be brought down as supply exceeds demand and supermarkets and multinationals capture a bigger share of the organic banana trade.



In Alto Beni, bananas are grown in association with citruses (A. Vezina, INIBAP).

not an important coca producer, this project is different in that its objective is to discourage farmers from drifting to the illegal cultivation of coca, not to wean them off. The participating farmers sign a pledge not to grow coca in return for help with their crops and schools, roads, water and electricity — all of which are sorely needed.

On becoming an organic farmer

The project was initiated in May 2002 and is administered by INIBAP on behalf of the Bolivian Vice-ministry of Alternative Development. It is far-reaching as it tries to modernize and rationalize the production, handling, transport and marketing of the bananas. Its challenge is to set up a self-sustaining system that will motivate

Bananas are grown in association with fruit trees even if it means lower banana yields and farmers with divided loyalties

farmers to put in the extra efforts needed to produce organic bananas that will also be competitive.

To increase quality, farmers were shown practices that improve fruit quality and keep the pest load down.

“Before, we were planting too many banana plants close to each other”, says Mario Vasquez Canaviri, a farmer known for keeping his plots neat and integrating the new knowledge. “They did not grow well because there was too much shade.”

Besides planting the right density of banana plants, Mario now de-flowers the young fingers, keeps the mat clean, removes non-functional leaves and the false hands, bags the bunches and selects the best sucker that will keep the cycle going.

The next step is to learn the ins and outs of organic fertilization. “We don’t have time to rest”, says Mario. “There is always something to do.” So far, the hard work has translated into a 30% increase in the quantity of bananas harvested.

Some past practices have been kept since they fit nicely with an organic production system. For example, the farmers are encouraged to continue planting *kudzu*, or *Pueraria thunbergiana*, a leguminous plant that fixes nitrogen and



Organic bananas being graded (upper left).

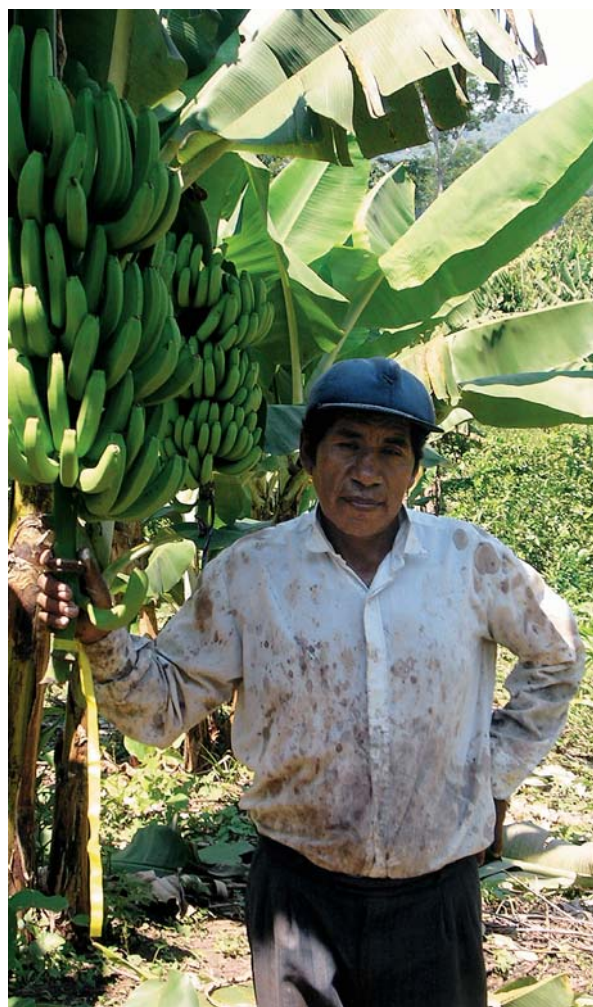
Makeshift pool to wash bananas (centre left).

Armindia Callizaya helping out her family during the weekly packing ritual (lower left)

(A. Vezina, INIBAP).

is used as ground cover to prevent erosion and conserve soil moisture.

Growing bananas in association with fruit trees has also been retained even if it means lower banana yields and farmers with divided loyalties. “For us it is a problem to the extent that the farmers do not dedicate themselves 100% to bananas. They are sometimes busy harvesting other crops”, explains Fernando. “But for them growing more than one



Mario Vasquez Canaviri, an Alto Beni organic banana producer (right) (A. Vezina, INIBAP).

crop is less risky. It is also better for the environment than a monoculture.” Moreover, another CICAD-funded project is helping farmers get more mileage out of their cacao trees and has made mixing in banana plants a condition for participating in the project.

After the harvest

Another change brought about by the project is the need to pack the bananas in boxes to protect them during transport. Farmers have been taught how to wash them to leach the latex, how to protect them against crown rot and how to pack them. Not all the farmers participating in the project

An organic banana paradise

In 1997, banana production in northern Peru was struggling when El Niño hit, leaving devastated fields in its tracks. Damage was heaviest on the coast but the Chira valley, some 50 km inland, was also affected. The following year, the Peruvian Ministry of Agriculture (MINAG) solicited INIBAP's help to rehabilitate the banana production in the Chira valley with the aim of exporting the bananas. But rather than export conventional bananas into a saturated market dominated by multinationals, Salomon Soldevilla, at the time an agronomist for MINAG and currently INIBAP's co-director of the Alto Beni organic banana project in Bolivia, suggested that Chira valley farmers, who own on average 0.7 hectares, produce organic bananas instead.

Already blessed with class I soils and plenty of irrigation water, the region is also exempt from black leaf streak disease because of its dry climate. To top it off, the production zone is strategically situated 60 km from a port easily accessible by a good road – the perfect spot to grow organic bananas. The only thing missing was money. INIBAP paid for the first certification, four mobile packing stations, soil analyses to design the fertilization programme and advisors but the bulk of the money came from the Peruvian government. "We were given only 10 gallons of gas a month", remembers Salomon. "Sometimes, I was using my own money to visit the producers".

Despite the shoestring budget, the project helped over 1600 farmers, who represent 38% of the Chira valley banana producers, and propelled Peru into the leading pack of organic banana producers. Peru is now the third most important producer of organic bananas, which in 2002 represented an export value of US\$ 6.1 million and the real net income of organic banana producers increased by 187% between 1998 and 2002.

Since there were no funds to help the organic producers market their bananas, in 2000, Dole took up an invitation to visit the region with a view to buying part of the production and exporting it on the organic market. It accepted and national companies have since joined the fray. The companies cover the cost of the organic certification for the organic producers who sign an exclusivity contract with them. In addition to the certification, the producers are guaranteed a fixed price for their fruits. Moreover, the reduced supply of bananas on the domestic market has led to an increase in the prices paid to conventional producers. Exporting organic bananas not only benefited the organic producers, it also helped small-scale producers get a better price for their noncertified bananas.



are washing and packing their bananas; some prefer to avoid the extra expense. But for those who do, packing is generally a family affair conducted by the side of the road under a thatched shelter and using a rudimentary pool.

These makeshift packing stations have raised the quality of the bananas but not to the level that can be attained in modern packing stations. So 12 km of cableways linked to four industrial-scale packing stations have been built and will be operational in 2004. Farmers from nearby plots will bring the bananas to the cableway, hook them on and watch them roll away to be washed, graded and packed by people from their community.

The local population is impatient to see the packing stations in action, not least because they will provide jobs. The fact, however, that the packing stations can process far more fruits than the quantities currently grown in the nearby plots worries Salomon Soldevilla, the national co-director of the project. He hopes they will not encourage a conversion to the banana monocultures common in other parts of Latin America.

A Peruvian, Salomon worked on a successful organic banana project in northern Peru (see 'An organic banana paradise') before landing a job with the Alto Beni project, first as a consultant and then as

co-director of the project. He has been instrumental in turning around Bana Beni SRL, the La Paz-based marketing company created by the project and owned by the ten producer associations. It is run by the producers' sons and daughters, whose inexperience, however, made for a rocky start.

An audit of Bana Beni in 2003 revealed that the production cost was 50% higher than the price at which the bananas were sold. The company had only one client, losses were increasing and the staff were not trained in handling a highly perishable fruit. Without changes, the company was heading straight for bankruptcy.



Antonio Vilas in the Chira Valley is one of the many producers who converted to organic bananas in the wake of a MINAG/INIBAP project and now sells to Dole (A. Vezina, INIBAP).

Six months later, losses were cut to 6%. Eighty-three percent of the small but lucrative school breakfast market in La Paz and neighbouring El Alto has been captured by Bana Beni and the latter has signed contracts worth US\$ 284 000 for 2004. Salomon pulls out a graph showing that, if the trend continues, the company will break even before the end of 2004.

Although the school breakfast market represents only 5% of the local demand for bananas, it is an important one for the young company because it pays more for a better quality product. Moreover, not only are children in public schools given a nutritious banana as part of

their breakfast, they also get exposed to the concept of organic farming.

On the other hand, the La Paz street vendors, who represent 93% of the market, and the supermarkets, which represent a negligible share of the La Paz market (0.5%), do not pay as well and are insensitive to quality.

The future

If Bana Beni wants to continue increasing the price it offers organic banana producers, who want their standard of living to keep on improving, it has to find buyers in other countries. The best prospects so far are Chile and southern Peru, only a few hours by road from La Paz. Contacts have been made in both countries and shipments should start in 2004.

Northern Argentina is another possibility. "It is easier for us to sell to the cities in northern Argentina than for Peruvians who have to ship their bananas by boat to Buenos Aires and then load them on trucks to go across the country", explains Fernando. He has not given up on the possibility of sending organic bananas overseas, but he is less convinced than Salomon that it will happen in 2004.

Scheduled to end in May 2004, the project will hopefully be extended to consolidate its achievements and ensure that the changes will outlast the project. As Filomena Mendizabal from the Piquendo association remarks: "A child who has just learned how to walk is not left alone to walk by him or herself."

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