

SMALLHOLDERS AND NICHE MARKETS: LESSONS FROM THE ANDES

Jon Hellin and Sophie Higman

Abstract

Research in Bolivia, Peru and Ecuador focused on the extent to which producers of two widely traded crops, bananas and coffee, are able to take advantage of expanding global markets. In Ecuador, banana production is largely in the hands of independent producers while a handful of companies control the export trade. These companies have considerable influence on the prices paid to farmers. The majority of farmers are hardly able to cover their production costs. Coffee producers are confronted with a market where over-supply in recent years has led to a fall in coffee prices. The banana and coffee sectors demonstrate that smallholder producers often find themselves disempowered and unable to benefit from conventional commodity markets. Several non-governmental organisations (NGOs) are working with banana and coffee producers to tap into niche markets, which include organic, fair trade and gourmet markets. These offer greater benefits to farmers, by paying them a higher price for their produce, but demand new skills and forms of organisation.

Research findings

- Farmers seeking access to global markets have to meet demands for quality of produce as well as for quantity and continuity of supply.
- Smallholder farmers need to learn new skills and acquire sufficient business acumen in order to benefit from global markets.
- While NGOs have provided farmers' associations with technical advice, their greatest contribution has been working with farmers to overcome some of the transaction costs associated with accessing niche markets.
- This contribution has taken the form of facilitating access to credit, providing infrastructure (such as packing sheds and milling machinery), enabling farmers' access to organic and fair trade certification schemes, and establishing trading links between producers and buyers.
- Despite some evidence of progress, the degree to which the niche markets will be able to absorb the growing number of aspiring participants is unclear.

Policy implications

- The skills that farmers need to access niche markets are also the skills that they need to compete more effectively in conventional markets. This has implications for agricultural research and extension agendas.
- Public and private interventions are needed which focus on the real transaction problems faced by farmers; an enabling policy environment is needed in which the principles and practices of fair trade are institutionalised and which assists farmers to gain access to market networks, credit and infrastructure.
- Farmers need to be empowered to solve their own problems through extension methods that emphasise active participation and innovation.

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Acronyms

ACPC	African Caribbean and Pacific
ANDEC	<i>Asociación Nacional de Exportadores de Café</i>
APC	Association of Coffee Producing Countries
APPG	<i>Asociación de Pequeños Productores de Guabo</i>
CIAL	Local Agricultural Research Committees
COBOLCA	<i>Comité Boliviano de Café</i>
CONABAN	<i>Corporación Nacional de Banereros</i>
EU	European Union
FECAFEB	<i>Federación de Caficultores Exportadores de Bolivia</i>
FFS	Farmer Field School
FLO	Fair Trade Labelling Organisation
Fundatierra	<i>Fundación Agro-ecológica Amigos de la Tierra</i>
ICA	International Coffee Agreement
IFOAM	International Federation of Organic Movements
NGO	Non-Governmental Organisation
UNDCP	United Nations Drug Control Program
USAID	United States Agency for International Development
WTO	World Trade Organisation

SMALLHOLDERS AND NICHE MARKETS: LESSONS FROM THE ANDES

Jon Hellin and Sophie Higman

1 INTRODUCTION

Meeting the demands of the global market

For smallholder farmers, globalisation means greater market risk (increased vulnerability) together with new opportunities created by larger global markets (Ellis and Seeley, 2001). The reality is that meeting market requirements represents a challenge for farmers who seldom have the technical and financial resources to adapt quickly to these demands. Even if the macro-economic conditions are favourable, farmers still have to meet demands for quality of produce as well as for quantity and continuity of supply. In addition, farmers must become adept at financial planning and control, forecasting and deal making. In other words they must become more business-like. But how do farmers acquire technical knowledge and business acumen? How do they best adapt to the behaviour of international markets? And how do farmers ensure that they benefit from the opportunities provided by an increasingly interdependent global economy rather than being dominated by a handful of multinational companies?

The authors sought to answer these questions during field work carried out in Bolivia, Peru and Ecuador between June and December 2000. This paper focuses on two widely grown and traded commodities: bananas and coffee. The research process consisted of informal interviews with non-governmental organisations (NGOs), private companies, international aid organisations and government bodies. Visits were made to farming communities throughout the region, often accompanied by representatives from one of the aforementioned organisations. The authors used a combination of participant observation (Silverman, 1993:9; Guba, 1981) and semi-structured interviews (Pretty et al., 1995:73) in each of the farming communities.

The unequivocal message from farmers and those organisations working with them is that the conventional export markets are unlikely to contribute to sustainable livelihoods. Farmers are more likely to benefit from global markets if they are able to tap into niche markets. In the case of bananas these include fair trade and organic markets, and in the case of coffee, fair trade, organic and gourmet markets (see below). Lessons can be learnt from farmers' attempts to access these niche markets. The following case studies illustrate the challenges and opportunities facing farmers as they seek access to market opportunities and identify some of the changes that are needed if the rural poor are to participate in the potential benefits of globalisation. This has implications for policy-makers, researchers and extension agents as they endeavour to bring about productive and equitable improvements in smallholder agriculture.

Niche markets

There are three niche markets: fair trade, organic and, in the case of coffee, gourmet. The growth in these markets is characteristic of the extent to which markets have become 'buyer-' or 'user-driven' (Gibbon, 2001). Buyers demand quality monitoring on an *ex-ante* rather than *ex-post* basis and, as a result, the emphasis is on certification rather than product testing. The attraction of the niche markets is that the product, for example bananas or coffee, is sold at a premium and this is passed on to the farmer. The markets are distinct and separate. In the case of fair trade and organic there are environmental and social criteria that have to be met before the product can be sold in each of these markets (see below). Confusion arises because organic produce and gourmet coffee can also be sold in the fair trade market as long they meet the required fair trade criteria and have been certified.

Fair trade aims to improve the social, environmental and economic conditions of disadvantaged producers by giving them direct access to a market, guaranteeing better trading and working conditions and thus providing them with the tools that permit them to control their own development, and to invest in environmentally-friendly production methods. It seeks to change unfair international trading structures and to offer small-scale farmers (and craftsmen) in developing countries the chance to find outlets for their produce and to make a decent living from the sale (Logli, 2001). It, therefore, includes a process of learning and self-help rather than focusing exclusively on the market dimensions of the partnership (Tallontire, 2000). Fair trade has also grown over the last five to ten years.

Farmers often have the support of organisations based in the first world which organise the importing and distribution of the goods in question and create consumer awareness. The Fair Trade Labelling Organisation (FLO) which coordinates fair trade at the international level and represents national fair trade initiatives in 17 countries, holds the register of certified producers for each product type. There are three basic prerequisites for the long-term development of fair trade: high quality produce; access to mainstream food stores; and assurance of compliance with fair trade criteria (FAO, 1999a). Although the words 'fair trade' are not covered by any legal definition (Logli, 2001), specific social and environmental criteria have been established by FLO. A summary of these criteria is provided in Box 1.

FLO stipulates that all potential fair trade sources have to meet minimum social and environmental criteria before being accepted for the Fair Trade certifying procedures. The assurance that sources comply with

the environmental and social criteria is provided by the labels Max Havelaar (in France, Belgium and the Netherlands), Transfair (in Germany, Austria and Italy) and The Fair Trade Foundation (in the United Kingdom and Ireland). Unlike other certification schemes (e.g. for organic certification), FLO does not charge producers for the certification process. Instead importers and retailers are charged a royalty fee for use of the fair trade label.

Organic farming aims to produce foods in an environmentally benign way, maintaining natural biological cycles without using chemical inputs. The International Federation of Organic Movements (IFOAM) coordinates the network of the organic movement around the world. IFOAM has developed Basic Standards which set out international Principles, Recommendations and Standards for organic production (see Box 2). The Basic Standards include provisions for social justice, including recommendations that there be adherence to International Labour Conventions. The IFOAM Basic Standards provide a framework for certification bodies worldwide to develop their own certification standards. In the case of bananas, standards are generally established in importing countries (FAO, 1999a). Farmers who produce food in accordance with the organic certifier's standards, and whose compliance is checked by the certification bodies, may be certified as organic.

Box 1 Summary of fair trade social and environmental criteria

Details on the criteria for coffee and bananas can be found at www.fairtrade.net/coffee.htm and www.fairtrade.net/banana.htm respectively.

The problems experienced by producers and workers in developing countries differ. Most coffee producers are smallholder farmers who work their own land. For these producers, receiving a fair price, on time, for their beans is more important than any other aspect of fair trading. Most bananas, however, are grown on plantations and the concern for workers employed on these plantations is decent wages and working conditions. To reflect such differences, the FLO criteria are individually researched for each Fair Trade-labelled product (coffee, bananas, tea, cocoa, honey, sugar and orange juice) in consultation with the producers and workers concerned.

The Fair Trade Label guarantees:

- a price which covers the cost of production
- social premium for development purposes
- partial payment in advance to avoid small producer organisations falling into debt
- contracts which allow long-term production planning
- long term-trade relations which allow proper planning and sustainable production practices

Fair production conditions for farmers' cooperatives include a democratic and participative structure. For plantations and factories the workers should have:

- decent wages (at least the legal minimum)
- good housing, where appropriate
- minimum health and safety standards
- the right to join trade unions
- no child or forced labour
- minimum environmental requirements

Gourmet coffees are often high-quality Arabicas sold as a brand rather than a commodity. They are frequently marketed as single-estate coffees, the combination of quality and limited availability giving them an exclusivity which often commands a very high price. The market in gourmet coffee, some of which is organic, has seen a growth in recent years. Whether produced conventionally or organically, it can be sold as fair trade so long as the producers have been certified.

2 THE MULTINATIONAL COMPANIES AND THE BANANA SECTOR IN ECUADOR

Green gold: a world commodity

Bananas originated in Asia and have been cultivated for over 4000 years. Missionaries brought the fruit to the island of Hispaniola in 1516, and it later spread to the rest of the Caribbean and Latin America. Bananas are produced all year round and make a significant contribution to food security in dozens of countries in the developing world. They are also traded widely and, in terms of gross value of production, are the world's fourth most important crop after rice, wheat and maize (Liddell, 2000). Between 1988 and 1998, world exports of bananas almost doubled to 12 million tonnes per annum, with an export value of over US\$4 billion (van de Kastele, 1998). The European Union (EU) is the biggest banana importer, consuming almost four million tonnes of bananas each year.

World trade is largely controlled by five companies: Chiquita Brands; Dole Food Company; Del Monte Fresh Produce; Noboa; and Fyffes. The banana companies are largely associated with Latin America, a region which accounts for 83% of world exports. Reflecting the companies' influence, traders still refer to bananas produced in Latin America as 'dollar bananas'. The companies are vertically integrated: they own or contract plantations, own sea transport facilities and manage distribution networks in consuming countries.

The companies' predominant position allows them unprecedented control of the market and much political influence. As a result, although the world banana trade

Box 2 Summary of IFOAM's Basic Standards

IFOAM's Basic Standards set out a series of Principles, Recommendations and Standards. The General Principles are the goals organic production and processing work towards. The Recommendations provide standards which IFOAM promotes but does not require, and the Standards are the minimum requirements which must be fully incorporated into certification standards. Details can be found at www.ifoam.org/standards/basics.html. The Basic Standards cover the following areas:

- organic ecosystems
- crop production
- animal husbandry
- aquaculture production
- processing and handling
- processing of textiles
- forest management
- labelling
- social justice

generates substantial profits, plantation workers and smallholder producers receive 1–3% and 5–12% respectively of the final retail price in Europe (Chambron, 1999). In this respect bananas are no different to other commodities such as coffee. Ecuador, the largest banana exporting country in the world, clearly illustrates both the power of the banana companies and the challenges faced by independent producers in securing adequate compensation for their harvest.

The banana sector in Ecuador

Ecuador dominates world markets, exporting over four million tonnes per annum (35% of world trade) from 150,000 hectares (ha) of plantations. Ecuador is followed by Costa Rica (two million tonnes per annum) and Colombia (1.5 million tonnes per annum). In 1997, banana export revenues represented almost 25% of Ecuador's total value of merchandise exports (FAO, 1999b). The banana industry now employs over 300,000 people, representing just under 10% of the economically active population (Chambron, 2000). Ecuador's comparative advantage stems from favourable natural, economic and social conditions (Box 3) (Wunder, 2001) which means that production costs in Ecuador are approximately 50% lower than in Central America. José Riofrio (pers. comm.), a banana expert working at the University of Guayaquil in Ecuador, explains that Costa Rica needs to produce on average 2500 boxes/ha/year to break even, while in Ecuador the figure is 1600 boxes/ha/year (each box weighs approximately 19kg). Following the resolution of the transatlantic banana dispute, Ecuador is well placed to dominate further the large and lucrative European market.

In Latin America, most bananas are grown on plantations owned or controlled by the banana-exporting companies. For historic reasons production in Ecuador is almost entirely in the hands of 5200 independent producers who manage about 150,000 ha (Striffler, 1999). Andrés Arata (pers. comm.), Director of the *Corporación Nacional de Banereros* (CONABAN), a banana trade union in Ecuador that represents about

240 of the larger producers, explains that approximately 60% of these 5200 producers are smallholders with fewer than 30 ha of bananas, 30% have 30–100 ha, and 10% have more than 100 ha. The better known banana companies such as Dole, Chiquita and Del Monte do not own plantations in Ecuador. Only two Ecuadorian-owned companies have plantations: Favorita and Noboa each own approximately 7000 ha. They also buy bananas from some of the 5200 independent producers.

'Independent producer' is, however, a relative term. Since the banana companies generally stopped growing bananas directly, various types of contract farming have developed in Ecuador. The unifying theme is that a handful of companies, including Noboa (38%), Dole (18%), Favorita (16%), Palmar (8%) and Del Monte (8%), control 90% of the export trade. These companies fix prices and their vertically-integrated supply chain gives them enormous influence on many farm management decisions such as disease control.

Contract farming: Sharing risks?

Contract farming is a way of allocating risk between producer and exporter. The former takes the risk of production and the latter the risk of marketing. Often, the farmers cover all the production costs by providing land, labour and tools. Generally, the producers are responsible for transporting harvested bananas to the port. The exporting companies retain responsibility for technical assistance and marketing, provide all the packing material and deal with the paperwork at the ports. While most contracts require the producers to follow the company's technical advice, the same company is often absolved of all responsibility for the results (Glover, 1983:429). Contract farming is found in other banana-exporting countries such as Honduras and Costa Rica (Glover, 1983:250) and in other agricultural commodities such as coffee (Brown et al., 2001:38).

In Ecuador, the companies enter into contracts with farmers, often specifying how much produce they will buy and the price they will pay for it. In some cases,

Box 3 Banana production and Ecuador's comparative advantage

- Ecuador's lowland soils are fertile and banana productivity is high.
- Labour costs are low and there are sufficient skilled workers.
- Historically Ecuador has not suffered from periodic hurricanes and storms such as Hurricane Mitch which devastated Honduras's banana sector towards the end of 1998. However, in recent years, and from an economic perspective, rainfall due to *El Niño* has caused as much damage to Ecuador's banana sector as Hurricane Mitch did in Honduras.
- In the lowlands there is enough water (rain and rivers) but no excess of humidity, hence there are fewer problems with diseases such as the leaf-browning fungal disease caused by *Mycosphaerella fijensis* and known in many parts of Latin America as *sigatoka negra*.
- In Ecuador production is greatest between December and May when demand is high in Europe. In Central America, banana production peaks between October and December when the demand in Europe is low.

Box 4 Advantages of contract farming from the perspective of the exporting companies

- Companies lessen the risks of expropriation by locating fewer of their assets in-country.
- Contract farming presents a progressive image by involving local producers.
- By purchasing produce rather than directly employing labour, the companies can circumvent trade unions, minimum wage laws and child labour legislation.
- Because of the dependent position of smallholder producers *vis-à-vis* the exporters, the former are reluctant to take controversial political stands.
- The companies are less likely to be held responsible for any mismanagement that might lead to land degradation and environmental pollution.
- The companies can still control management decisions at the farm level. The advantage of buying from smallholders is that they are less likely to challenge farm management recommendations made by company technicians.

the company agrees to buy all the bananas from a specific area. There are many advantages for the exporting companies in contract farming (Box 4).

Exporting companies often have more than one method of obtaining supplies. For example companies such as Favorita (see below) have their own farms as well as contracts with growers, while others purchase bananas on the open market. This mix of internal, contract and market purchases gives them a combination of control and flexibility in acquiring bananas (Glover, 1983:415). In this context, it is not clear to what extent producers will benefit from the expanding opportunities for exporting bananas.

The main advantages of contract farming from the producers' perspective is that there is an assured market for the produce. Independent smallholder producers either supply the exporting companies directly and/or sell to a middleman. There are also reports that, with a contract, a producer is more able to access credit, either from the banana company or from the banks, who generally accept a contract as collateral (Glover, 1983:3:). There are also larger producers who supply one or more of the exporting companies and employ workers on their plantations. Contract farming in the Ecuadorian banana sector, therefore, encompasses a wide range of situations.

The main disadvantages faced by the producers is that they have little influence over the prices they receive and they have to shoulder the production risks. For example, excessive rainfall in 1997/8 caused by the weather phenomenon known as *El Niño* destroyed roads and bridges. The exporters buy ship-side so it was the farmers who had to resolve the problem of transporting their produce to the ports. In addition, high rainfall led to an increased problem of *sigatoka negra* which in turn meant that farmers faced higher fumigation costs.

Contract farming in practice: The company, the producer and the middle men

With 16% of the banana export market, the holding company, Favorita, is one of the biggest exporters in Ecuador. Its banana exporting subsidiary is called Reybanpac and it also has companies making fertilisers, chemicals and cardboard. Another subsidiary owns two large banana plantations (Hellin and Higman, 2001a). Favorita's bananas come both from these plantations and also from 500 independent producers who either supply the company directly or via middlemen. Angel Samaniego (pers. comm.) used to be employed by Favorita, then when they sought to streamline their operations, he was encouraged to set up his own company to supply his former employers. He now oversees 12 producers who manage a total of 400 ha of plantations and sell to Favorita throughout the year. Of the 12 producers, some have 20 ha of plantation, others more; 60 ha is the largest holding.

Juan Quinteña is one of the Angel Samaniego's suppliers. He has 10 ha of bananas and is typical of many smallholder banana producers. He used to sell directly to another exporter but found that they bought

his produce one week and not the next. He decided that it would be far better to sell to Favorita on a regular basis and for a regular price, albeit via a middleman.

Not all farmers enter into contracts with the exporting companies. Some prefer to sell on the open market and in times of high demand may secure a higher price for their produce than contract farmers, by touting it around the buyers. However, there is the real danger that, when demand falls, they will receive lower prices, or not be able to sell at all. The stability provided by a guaranteed sale, even at a relatively low price, is a strong incentive to enter into a contract.

Favorita is frank about its relationship with the producers. The company prefers working with smallholders because they can dictate the timing of the aerial spraying against *sigatoka negra*, which is done by their subsidiary Aerovic but paid for by the farmers. Juan Quinteña acknowledges that the spraying costs mean that bananas are not very profitable but says that they are still more profitable than cacao, and have the advantage of producing a regular income. Cacao is only harvested once a year.

One of the difficulties in determining a fair price for a box of bananas is that few smallholder producers know what their actual production costs are. This problem is not confined to Ecuador and is found worldwide (Hubbard et al. 2000:19). Banana exporters in Ecuador refer to production costs of US\$1.40–US\$1.80 per box, while figures provided by CONABAN indicate that production costs are about US\$2.20 per box. José Riofrio from the University of Guayaquil argues that production costs vary because the calculation methods used are different. He believes that production costs are approximately US\$1.60–1.80 per box (including delivery to the port) and says that those who say that they are higher are probably including all the costs of infrastructure development, such as irrigation, into their costs for the first year or two, rather than amortising the cost over 7–10 years. However, organic banana producers (see below) argue that too often the costs of conventional (non-organic) banana production are based on inadequate management practices. If farmers managed their plantations properly, production costs would be US\$2.30–2.40 per box.

What is less contentious is that farmers almost without exception receive substantially less than the \$2.18 per box of bananas, delivered to the port, stipulated under Ecuadorean law. For example, in November 2000, Favorita paid farmers \$1.90 per box. According to Andrés Arata (pers. comm.) Favorita is not alone in this; since 1999–2000 none of the exporting companies has paid the minimum price. This was confirmed by both producers and exporters during interviews in November 2000¹. Smallholder farmers claimed that even though they received \$1.70–1.90 per box, they were often required to sign a form saying they had received the legal minimum price of \$2.18. When the market is saturated, producers who have not signed contracts with the companies or with middlemen supplying the companies, may receive less than \$1 per box. These bananas are often destined for the local market or are exported to Chile.

It has been calculated that Ecuadorian producers receive approximately 12% of the final retail price of a box of bananas in Europe. Approximately 20% of this is spent on transport, 30% on ripening costs and the rest on distribution and retailing (José Riofrio, pers. comm.). This compares favourably with other banana-exporting countries where smallholder producers often receive 5–12% of the final retail price (Chambron, 1999). In Ecuador, while there may be some debate about actual production costs, it is clear that many smallholder farmers are hardly covering these costs. Farmers interviewed at the end of 2000 argued that, based on a rough estimate of their production costs, a more equitable price would be \$2.50 per box rather than the \$2.18 stipulated by law and the \$1.70–1.90 they actually receive².

Given the increased concentration in the market and the retail sector, all food companies are obliged to strengthen their market orientation. Dole, for example, is developing an aggressive strategy in this field, leading to partnerships with retailers, wholesalers and distributors, and the establishment of integrated import, ripening and distribution systems. In this context, farmers in Ecuador seem to be trapped in a system which, in the absence of a strong trade union to defend their interests, offers few opportunities to improve their profit margins. Despite these problems, there is a growing number of examples where banana producers have formed farmers' associations and where they have negotiated higher prices for their produce. Many have done this by circumventing the power of the traditional exporting companies and securing a niche in the growing fair trade and organic banana markets.

Fair trade and organic production: Contributing to sustainable livelihoods?

In recent years there has been an increased demand in the West, particularly the EU, for fair trade and organic produce. At the end of November 1996, the first fair trade bananas were imported into Europe. In 1997 total sales of all fair trade bananas in Europe were 12,300 tonnes, rising to over 22,000 tonnes in 2000 (Liddell, 2000). The largest fair trade markets are in Switzerland and the Netherlands (FAO, 1999a) but growth is expected in Germany and the United Kingdom (Chambron, 2000). Farmers are already benefiting from these market opportunities; workers in the Dominican Republic who supply fair trade bananas to one of the UK's largest supermarkets receive a premium of \$1.75 per box of bananas exported. This money goes to a social fund for the workers which has been used to build a packing shed and to register workers from neighbouring Haiti.

In 1997, the EU imported almost 10,000 tonnes of organic bananas with Germany as the largest market (FAO, 1999a). The main obstacle to the growth of this market is on the supply side. Bananas are subject to several diseases which make them difficult to grow organically, although this is less of a problem in Ecuador than elsewhere. If such constraints can be addressed, it is estimated that organic banana sales will treble, in line with the market share of other organic fruits and

vegetables, reaching 45,000 tonnes or approximately 1.5% of the EU's annual banana consumption (FAO, 1999a). Due to the premium paid by consumers, organic production can offer farmers more benefits than conventional banana production, and even more when they are also sold through fair trade initiatives.

Whilst farmers can benefit by selling in the fair trade and organic markets, farmers' initiatives in Ecuador demonstrate the range of obstacles and opportunities facing those seeking to set up independent marketing channels. Cumandá is a canton in the low-lying hills that separate the flat coastal plain of Ecuador from the Andes. Smallholder farmers in the region grow bananas, sugar cane, citrus fruits, cacao and coffee. Joseph Brown and Marcelo Basquez are typical of banana farmers in the area, each having approximately 15 ha under cultivation, two-thirds of which are grown to small finger bananas, known locally as *oritos*. Marcelo and Joseph are the driving force behind a group of 15 farmers who currently sell to Dole, Noboa and Del Monte.

The Cumandá farmers have set up a farmers' association and are trying to sell their *oritos* directly in the organic and free trade markets in Europe (Hellin, 2001). They have established contacts with independent banana importers and European NGOs who may be able to assist them in meeting the fair trade and organic certification standards. They hope to link up with a farmers' organisation in the Pacific lowlands of Ecuador called the *Asociación de Pequeños Productores de Guabo* (APPG). This association is already selling 20,000 boxes of bananas to the EU each week. Approximately 12,000 of these are sold in the fair trade and 8,000 in the conventional market. In order to secure a niche in the fair trade and organic markets, farmers' associations such as those in Cumandá will need to meet strict quality criteria and ensure sufficient quantity of produce and continuity of supply.

The struggle to circumvent the power of the banana exporting companies is also being waged by the larger independent banana producers. The Cañarte family are big landowners, with three plantations totalling just under 500 ha (50, 200 and 230 ha respectively) on the coastal lowlands south of the port city of Guayaquil. Production is organic and most of their bananas are exported to Italy. The Cañartes believe that they are seen as a threat by the banana companies which make considerable profits in Ecuador from the sale of chemicals, some of which they produce themselves.

Whilst organic production in the low-lying hills of Cumandá is relatively easy, the accepted wisdom is that in the more humid lowlands, *sigatoka negra* can only be controlled by spraying (FAO, 1999a). The Cañartes dispute this and stress that their organic production system has European certification. Management of the Cañartes' plantations involves applying six kg of a natural fertiliser called *bokashi* to each banana plant four times a year. The fertiliser is a mixture of residues of mango, pineapple, banana, burnt rice husks, pods of various legume trees, coffee pulp and cattle manure. Micro-organisms imported from the United States speed up the decomposition of the mixture so that it can be applied to the banana plantations after

11 days rather than six months for conventional compost. In addition workers spray the banana plants daily with a home-made foliar spray. The spray is made from whey yeast of milk, cattle manure, the liquid drained from the decomposing *bokashi* and micro-organisms.

The Cañartes are adamant that the organic system can be replicated by smallholder farmers and they are advising APPG farmers to turn 20,000 ha into organic banana production. Furthermore, the Cañartes assert that organic production is more profitable than conventionally-managed bananas (Box 5).

Box 5 The costs of organic banana production

- Labour costs on an organic farm are 30–40% higher than on a conventional plantation.
- Production in the organic system is 80–90% of that in conventionally-managed plantations.
- Despite higher labour costs, organic production costs are \$2.30–2.40 per box. There are no costs for applications of pesticides; fertiliser is home-made and is low-cost to apply.
- Organic bananas sell for a premium and, according to the Cañartes, the price when delivered to the port is \$6–7 per box. However, unlike those selling on the conventional market, organic producers have to pay for the cardboard boxes, costing \$1–1.20 per box.
- Farmers selling conventional bananas for \$1.90 per box are hardly covering production costs, and yet they could secure a substantial premium, with marginally higher production costs, were they to produce organic bananas.

Organic certification

The Cañartes' one complaint is that, although their plantations have Italian organic certification and their produce is sold there, attempts to break into other national markets, such as the United Kingdom, have been hampered by each country's preference for its own certification. According to the Soil Association, the UK's main organic certifying body, produce certified by a recognised EU certifier can be sold legally anywhere within the EU. The main advantage of being certified by a national organisation is that the national logo is likely to be better recognised than and have marketing advantages over, in this case, an Italian one. Potentially the Cañartes' organic bananas could be sold in the UK with a Soil Association logo once the Soil Association has ascertained the credibility of the Italian certifier. The process can be costly because it involves the Soil Association verifying the Italian certifier's degree of quality control and standards of operation.

The issue of organic certification can be a major obstacle to smallholder farmers' associations. Banana producers are confronted with different certification schemes and may not know which programme to choose in order to improve their access to markets, even though many of these schemes come under the basic standards set by IFOAM. Some growers opt for multiple certification but this is expensive and time-consuming. The cost of the inspection visit may be exorbitant and the farmers may lack the skills and information needed to deal with the administrative procedures involved.

Partial solutions to the above problems include more direct marketing channels between producers and consumers so that the former can more readily generate the resources needed to obtain certification. For example, if farmers were able to sell their produce through fair trade channels they might be able to raise the funds to pay for organic certification. They can also, in theory, get together and establish an internal control system so that external auditors could inspect the system and a few sample farms rather than all the farms. A very successful example of this is COCLA, a coffee cooperative in Peru (see case study below). However, the problem of how farmers' associations can acquire the skills to establish internal control systems remains. Technical and marketing obstacles such as these facing smallholder banana associations are shared by those coffee producers in Ecuador, Peru and Bolivia, who are trying to secure a foothold in niche markets.

3 NICHE MARKETS AND THE COFFEE CRISIS

The coffee market: Low and fluctuating prices

Coffee originated in Ethiopia and is now grown in 80 countries in Latin America, the Caribbean, Africa, Asia and the Pacific. Worldwide, coffee now covers over 100,000 square kilometres. Annual yields are in excess of 5.7 million tonnes and it is the most valuable agricultural commodity in world trade (The Fairtrade Foundation, 1997). Coffee provides a living for over 10 million producers of whom over two-thirds are smallholder farmers with fewer than five ha of coffee (Brown et al., 2001).

In recent years, however, the world market price of coffee has fallen dramatically. Between 1989 and 1993 there was a 50% reduction in the world price of coffee (The Fairtrade Foundation, 1997) and in December 2000 international coffee prices hit a 30-year low with Arabica selling at \$0.64 per pound and Robusta at \$0.33. For many smallholder coffee producers, including those in Ecuador, Peru and Bolivia, the price of coffee has dropped below the costs of production. Coffee producers' livelihoods have become increasingly dependent on the behaviour of international markets. A big recovery in prices is unlikely (The Economist, 2001a; FAO, 2001a).

Low coffee prices have forced many farmers either to abandon production or to seek temporary off-farm employment. The latter is the cause of a vicious circle whereby farmers' neglect of their coffee plantations has led to a deterioration in the quality of coffee produced and a further reduction in the price that they receive for their crop. However, faced with the vagaries of world markets in terms of low and fluctuating prices, increasing numbers of coffee producers are beginning to work together to pool their resources and improve their negotiating position in the market. These groups of farmers are being encouraged to produce high-quality coffee for the fair trade, organic and gourmet coffee markets. As with bananas, these niche markets offer higher prices than conventional markets. Farmers

seeking entry to these more equitable markets have to overcome a series of obstacles, including acquiring business acumen and achieving the requisite quality control.

The adverse market conditions faced by smallholder farmers are the result of world oversupply of coffee and high volatility of international coffee prices. These, in turn, are partly caused by market liberalisation in producer countries, which include the progressive removal of subsidies, quotas, tariffs and trade barriers. The reforms mean that national governments in developing countries are less able to control or predict crop availability, in terms of volume and timing, or revive international commodity agreements (Gibbon, 2001; Bebbington, 1997). World production of coffee increased by an estimated 18% between 1980 and 1999 (Brown et al., 2001) and coffee production now exceeds demand by up to 10% (The Economist, 2001b).

Overproduction is largely due to the introduction of higher-yielding trees (such as the 'Catura' variety in Colombia), advanced technology, and the emergence of new producer countries such as Vietnam, which increased coffee production by 400% in the 1990s, and now produces 7% of the world's coffee. Exports from Vietnam are now greater than the combined total from Central America (The Economist, 2001c). Partly as a result of large-scale mechanisation, average coffee yields in Brazil are 4.2 tonnes per ha. This compares to average yields of 0.6 tonnes per ha achieved by smallholder farmers in the Andean region. Brazil now accounts for approximately 25% of all coffee exports, an increase from 21% during the period 1995–7 (FAO, 2001b).

Who sets the price?

The International Coffee Agreement (ICA) was established in 1962. Between then and 1989, 24 importing and 44 exporting countries worked together to stabilise coffee prices through export quotas and buffer stocks. In all coffee-producing countries, the state regulated production and export and offered a price stabilisation scheme to coffee producers by fixing the internal price. The form of government intervention ranged from state marketing boards in countries such as Uganda which bought and sold all coffee, to Colombia where the growers, supported by government, regulated the supply. The price control clause of the ICA was suspended in 1989, mainly because the coffee-exporting countries could not agree on quotas (Bentley and Baker, 2000). Producer countries flooded the market with stocks which had originally been withheld to sustain prices. The price plummeted and they have been highly volatile ever since.

Since the late 1980s and under pressure from international organisations such as the World Bank and International Monetary Fund, most coffee-producing countries have also liberalised their markets. One consequence has been that subsidies for coffee production and agricultural services have been reduced and private exporters have become the main players in world trading. Prior to this, the state licensed private exporters but controlled the volume of coffee they could export. Although farmers do now receive a greater share

of the export price, they are much more exposed to sudden price fluctuations associated with free market forces.

The price of coffee is set in international coffee exchanges in New York and London, where future contracts are traded. The international market is controlled by a handful of large companies such as Nestlé, Philip Morris, and the Neumann Group (Bates, 1997:13) who capture most of the value-added linked with coffee processing and retailing. Farmers receive approximately 20% of the retail price while about 70% of the wealth generated by world sales is captured outside the producing countries.

Coffee beans are exported peeled and dry but unroasted. By the time the beans arrive in the United States or Europe, the importer has incurred freight and insurance costs, as well as port and customs charges. The coffee is sold to a roasting company, which roasts and blends it, before selling to retail outlets such as supermarkets. The share taken by international intermediaries is increasing and is reflected in the growing difference between consumer and producer prices in the last 20 years. For example, between 1975 and 1993 the international price of coffee declined by 18% but that paid by consumers in the United States increased by 240% (Morissett, 1997). Coffee buyers are in a very strong position to determine price especially when supply exceeds demand, as it does now.

The workings of the coffee market are further complicated because, although there is an international price for coffee in New York and London, export prices from individual countries vary widely and depend on crop quality, demand for particular varieties and the reputation of the exporting country. The degree to which an exporting country's coffee varies from the international price is known as the differential. In South America it is often called the *castigo* (punishment) because the differential for most countries is well below the international price. The *castigo* for Bolivian conventional coffee is \$0.26 per pound. Thus, when Arabica is trading on the international markets at \$0.77 per pound, Bolivian coffee sells for \$0.51. Peru's *castigo* is \$0.16 per pound. Colombian coffee, on the other hand, has a positive differential of approximately \$0.10 per pound, reflecting its high quality.

In Bolivia, coffee producers and exporters agree that there is an urgent need to reduce the *castigo*. What is less clear is how this can be achieved. Bolivia produces less than one-quarter of 1% of world sales, a volume significantly less than Peru and Ecuador. Exporters' representatives such as the *Asociación Nacional de Exportadores de Café* (ANDEC) and the *Comité Boliviano de Café* (COBOLCA) argue that their negotiating position with world buyers could be improved were Bolivia to increase production ten-fold. They point out that one reason for Peru's lower *castigo* is their higher volume of sales on the world market, enabling them to negotiate more effectively with the international buyers.

To achieve the desired increase in production, ANDEC and COBOLCA propose bringing more areas into production, increasing the density of planting and hiring labour during the harvest, to ensure that the coffee

is picked at the optimum time. However, are these realistic options? In Bolivia there are generally 900–1000 coffee plants per ha while in Colombia the figure can be as high as 5000 per ha. The producers point out that lower densities are needed on poor soils to ensure sufficient nutrients for the plants. It is not clear that the soils in the coffee-growing regions of Bolivia are rich enough to sustain the planting densities found in Colombia. Above all, should Bolivia be trying to increase production when there is a worldwide surplus? Would it not be more prudent to try and reduce the *castigo* via an improvement in the quality of their coffee rather than focusing on the quantity produced?

Bolivian coffee exporters do recognise the need to improve quality. They lament the fact that many plantations are badly managed, resulting in a poor quality crop which in turn contributes to the high *castigo*. However, the key to producing higher quality coffee is careful management of the plots and post-harvest handling (see below), and in a time of depressed prices the farmers have little incentive to put in this work. The situation is made worse by the fact that many of the coffee producers are migrants from the Bolivian highlands and still have land there. With coffee sales barely covering production costs, they are returning to the highlands more frequently, leaving their plantations unmanaged.

Farmers are caught in a vicious circle. Without a market that delivers them a decent life, they are unable to deliver a quality product to the market (The Fairtrade Foundation, 1997). However, efforts are now being made to improve the quality of coffee and to break out of the vicious circle of low prices and poor management. The answer may lie in producing higher quality coffee for those niche markets that offer farmers higher prices.

Improving quality and securing niche markets

Throughout the Andean region, coffee producers are working together to pool their resources and strengthen their negotiating position. The successful groups are now able to pay for technical advice, buy equipment to process and grade their coffee, organise transport and market their crop in the fair trade, organic and gourmet markets. These markets offer farmers a significantly higher (and stable) price than conventional markets. There is an overlap between the three: for example organic and gourmet coffee may also be fair trade coffee.

As with fair trade bananas, buyers pay a higher price for fair trade coffee which covers the cost of production, a basic living wage and allows for investment. The price is agreed by the producers and FLO. Fairtrade coffee producers in Peru, Ecuador and Bolivia receive US\$1.24 per pound. In order to qualify, participating farmers have to have less than 10 ha of coffee, be members of a growers' association and contribute to the costs of running the association (the costs varying with the type of association). Organic coffee sold in the fair trade market sells for \$1.39 per pound, significantly higher than the New York price for conventional coffee (The Economist, 2001d).

Fairtrade-labelled coffee was launched at the end of the 1980s. Over half a million farmers worldwide are now producing coffee for this market which accounts for 1.7% of the European coffee market (Brown et al., 2001). Technically, the transition to organic production is not especially difficult because coffee producers in Bolivia, Peru and Ecuador have traditionally used few chemicals, mainly because inputs such as insecticides are often prohibitively expensive. Organic production is more labour intensive and production costs are higher than for conventional coffee. However, the improved management associated with organic production also leads to higher yields and a better quality of product. In Bolivia, promoters of organic coffee acknowledge that some farmers are unable to sell all their organically-produced coffee on the organic market and have to sell the excess on the conventional market. However, they hope that the higher quality of the organic coffee will contribute to an overall improvement in the Bolivian crop and eventually a reduction in the *castigo*.

The Andean countries also have the advantage that they have enormous ranges of altitude and types of coffee that are adapted to local conditions. This enables them to exploit specialised gourmet markets, best exemplified by Jamaican Blue Mountain Coffee. In the case of Jamaica, high quality coffee beans come exclusively from the Blue Mountains, are sold as a brand rather than a commodity, and command a high price. Good quality coffee is generally produced between 1200 and 1800 metres above sea level. The Andes provide plenty of such high altitude zones. Producers in Ecuador and Peru proudly point out that better-known coffee producers, such as Costa Rica, have fewer types of coffee because they lack the altitudinal range of the Andes. Furthermore, in countries such as Costa Rica technical advances in the last few decades have favoured the planting of a few selected and improved coffee varieties. This homogenisation of coffee types has not occurred to in Peru, Bolivia or Ecuador.

The production of high quality coffee is a labour-intensive exercise. Improved management includes optimum spacing between plants, weeding of the plantation, cutting back the plants, and regular replacement of old planting stock. The beans are harvested inside cherry-like fruits and have to be extracted, processed and graded. Traditionally, farmers dry the fruits, with the beans inside them, on the ground and then sell them to intermediaries who oversee further processing. This coffee is poor quality because it absorbs the aroma of the soil. The quality can be improved by milling the berries to remove the pulpy fruit, then fermenting the beans in water for 12 hours. This is known as parchment coffee as it is still encased in a thin skin. Further processing removes the parchment, prior to grading and export.

The case studies: Success, uphill struggles and determined starts

COCLA is an association of twenty-one cooperatives in the coffee-growing region of Quillabamba in southern Peru. It was established in the late 1960s and represents 5000 producers out of a total of 25,000 in the region.

Members of COCLA typically have 2–3 ha of coffee. COCLA offers technical advice to its members and buys and sells their produce. An additional 7000 producers sell their coffee to COCLA although they do not receive technical advice. COCLA has a sound reputation and survived the withdrawal of state support for the cooperative movement when the now disgraced Fujimori became President. Its success is due to a combination of factors (Box 6).

There is competition in the fair trade, organic and gourmet coffee markets in which COCLA is well-placed to take part because it has a solid reputation internationally for delivering an agreed good quality of coffee. It also has a commercial section in the capital, Lima, dedicated to seeking out market openings. José Rivera (pers. comm.), the Commercial Director, explains that COCLA produces and sells 5500 tonnes of coffee per annum (1999 figures). Approximately 35% of this is sold in the niche markets: Fair trade coffee makes up 11% of sales (approximately 20% of which is also organic) while a further 25% is sold exclusively in the organic markets. The remaining 64% is sold on the conventional market, even though it may have been produced organically. COCLA's current emphasis is on organic coffee, where it sees market potential. They have a handful of technical staff in the organic coffee programme, who have trained 400 farmer extension workers.

COCLA processes the coffee at its own plant since this can add almost 50% to the export value. Hence, even when the coffee is sold on the conventional market, by selling directly to COCLA participating farmers receive a higher price than they would have done had they sold to intermediaries.

The situation in the Caranavi region in Bolivia is in sharp contrast to that at Quillabamba. Twenty producer organisations, representing 8000 producers, are affiliated to the *Federación de Caficultores Exportadores de Bolivia* (FECAFEB). This organisation was founded in 1991 and largely represents farmers in the Caranavi area, the source of approximately 85% of national coffee production. FECAFEB, like COCLA in Peru, recognises the benefits of organic coffee and has been promoting its production since the early 1990s. It also offers

technical advice and seeks specialised markets for organic coffee especially in the Netherlands and Germany.

The problem faced by many Bolivian producers is that there are very few successful farmers' associations and cooperatives to market their coffee. The majority are forced to sell to intermediaries, receiving a lower price than via a cooperative. FECAFEB lacks the capital to set up a processing plant similar to COCLA's and sees no immediate prospect of being able to follow their example. At present it is focusing its efforts on identifying openings in the organic and fair trade markets. In addition, it is trying to secure funds so that farmers can obtain on favourable terms the basic infrastructure such as concrete fermentation tanks and milling machines needed to produce parchment coffee. In the meantime, faced with limited sales of organic coffee and low prices for conventional coffee, there is little incentive for Bolivian farmers to invest time and money in producing higher quality coffee.

The *Fundación Agro-ecológico Amigos de la Tierra* (Fundatierra) runs a coffee project in the district of Espindola in southern Ecuador where there are 5000 families, 3000 of which are coffee producers. Fundatierra currently works with 400 families and hopes to reach 600 over the three-year project which started in 2000. The project recognises that coffee will only be profitable if farmers can sell their produce in the organic and gourmet markets. Fundatierra receives funds from Canada so, unlike FECAFEB, is able to provide infrastructure support, as well as technical and marketing advice.

Fundatierra has encouraged the formation of farmers' associations, building on the social capital associated with existing agroforestry committees. Producers use few chemicals so it is not too difficult to switch to organic production. Fundatierra also rents out milling machines. However, its greatest contribution is on the marketing front where it is able to pay farmers an advance for their coffee, thus reducing the pressure to sell at an earlier date to intermediaries. However funds are limited (see below). Fundatierra is also able to organise and help pay for the costs of organic certification. Its marketing department in the city of Loja identifies suitable organic and gourmet markets. Farmers are adamant that what they have achieved to date would not have been possible without their assistance. It is too early however to determine whether the project will achieve the same degree of success as COCLA.

Obstacles to accessing the niche markets

Kydd (2001) distinguishes between two types of costs faced by farmers trying to access markets. He refers to the bio-physical processes of growing, harvesting and processing as transformation costs, while the costs of participating in markets are called transaction costs. According to COCLA, Fundatierra and FECAFEB, there are relatively few technical obstacles to producing high quality coffee: transformation costs are low. The greater obstacles are the transaction costs, specifically the lack of capital and marketing experience.

Box 6 The reasons for COCLA's success

- honest dealings with farmers (i.e. managers not running off with the co-op's money)
- credit worthiness which was built up slowly and by virtue of the fact that the cooperative paid back loans on time (COCLA's access to funds means that on delivery at the processing plant, it can pay farmers 85% of the final sale price)
- professional pro-active marketing (seeking out more lucrative fair trade and organic markets)
- sound technical advice (leading to consistently good quality coffee)
- large processing facilities so that it can control quality post-harvest and add value in-house
- competent chain of custody processes (so that independent organic and fair trade certification bodies can reliably visit and certify quickly)

According to The Fairtrade Foundation (1997), the lack of access to credit has become one of the key factors undermining the position of smallholder farmers. The problem operates at two levels: first, access to funds is needed to reduce the farmers' dependency on intermediaries; and second, farming cooperatives and NGOs often have difficulties in securing finance at favourable interest rates. This dependency is both a result and a cause of farmers' marginalisation.

Farmers are often caught up in a vicious circle. They are in a weak negotiating position, not only because they seldom have the means to process or transport their crop to market, but also because, with only one harvest per year, they are often desperate for cash before or by the time the coffee is ripe (The Fairtrade Foundation, 1997). Hence, they rarely have a choice regarding the timing of the sale or the identity of the buyer and are frequently forced to sell their coffee in advance for whatever price they can secure. More often than not this means selling to intermediaries. A major cause of this problem is that it is extremely difficult for them to secure loans at a fair interest rate from banks or other lending organisations.

A group of women working in one of the communal nurseries set up by Fundatierra in Ecuador summed up their dilemma. Each of them has 1–1.5 ha of coffee and, although they produce a good quality organic crop, by January, several months before the coffee harvest, they have used up all their savings and are forced to sell some of the crop in advance to intermediaries rather than all of it to Fundatierra as they would prefer. Fundatierra too has financial problems. Although the volume of organic coffee grown in the region is enough to meet market demand, Fundatierra is unable to meet fully this demand because it does not have sufficient capital nor can it secure the credit to pay participating farmers an advance for their coffee earlier enough in the cropping year. The long term sustainability of the project, when international donor funding ends after three years, will depend in part on continued access to credit.

Securing markets in the United States and Europe is a skilled job that initially requires outside assistance. Both Fundatierra and COCLA have full-time marketing specialists whose job it is to liaise with potential buyers. In 1999, COCLA launched a new organic, fair trade gourmet brand called *Machu Picchu* which is sold in the United Kingdom by Cafédirect and featured in a BBC television documentary in August 2001. Similarly a specialised organic coffee, *Café Amigo de los Aves* (Friends of the Birds), is being marketed as a joint initiative with the Smithsonian Migratory Bird Center. The marketing process is more than usually difficult because COCLA prefers selling coffee to smaller buyers with whom it can establish an interdependent relationship rather than with large buyers where it is in a weaker negotiating position because they can source their coffee from a host of different producers.

Another advantage of belonging to COCLA is that, by establishing an internal control system, COCLA ensures a reduction in the costs of organic certification because external auditors can inspect the system and a few sample farms. This is particularly important because

the organic coffee sold by COCLA is certified by three different organisations: OCIA for the US market; BioLatina for sales to Germany; and Naturland for the Netherlands.

Whilst COCLA's success illustrates that markets are available it raises a number of questions: to what extent can a new farmers' association emulate COCLA without the services of marketing specialists? And if marketing specialists are needed, who is going to pay for them initially? Linked to the issue of market identification is the question of the size of these niche markets. How much coffee can the fair trade, organic and gourmet markets absorb?

Fair trade initiatives cover only 1% of the world coffee market (Brown et al., 2001) and are therefore available to a very small percentage of producers. Even successful cooperatives such as COCLA have to sell more than 50% of their coffee on the conventional market. Thus, while The Fairtrade Foundation (1997) refers to surveys demonstrating that 75% of people surveyed indicate a willingness to pay more for a fairly traded product, supermarket sales demonstrate that there is a huge gulf between willing to pay more and actually paying more. Both COCLA and Fundatierra believe that the fair trade markets are largely saturated and are focusing on the organic markets. The growth in these organic (and gourmet) coffee markets is encouraging but with increasing numbers of farmers trying to tap into them (The Economist, 2001d), they are unlikely to absorb all the supply. Many smallholder coffee producers will still have to sell coffee on the conventional market.

4 LESSONS LEARNT

What future for farmers?

It may be the case that globalisation, far from being the greatest cause of poverty, is its only feasible cure (Crook, 2001:3). Globalisation is more likely to contribute to farmers' livelihoods if they can secure a niche in the more equitable fair trade and organic markets. In order to do so, farmers' associations and cooperatives need to be aware of market requirements and market their produce accordingly (Hubbard et al., 2000:58; Logli, 2001). Leadership qualities are needed, contacts need to be forged, negotiations carried out and capital is needed to improve plantation infrastructure and pay for certification. Farmers also need to meet strict quality criteria and ensure sufficient quantity of produce and continuity of supply. This has implications for policy makers and research and extension agendas especially in the context of structural adjustments that have led to a dismemberment of classical agricultural extension and research services to the extent that they are unable (or unwilling) to serve the needs of farmers living in complex, diverse and risk-prone environments (Gibbon, 2001; Sherwood et al., 2000; Ashby et al., 1995).

Policy changes

In sharp contrast to the rules currently governing world trade, an enabling policy environment is needed, one

in which carefully targeted assistance can be directed at smallholder farmers' associations. For example, following the demise of the International Coffee Agreement in 1989, there have been attempts to stabilise the price of conventional coffee. The Association of Coffee Producing Countries (ACPC) was established in 1993. In 2000, producer countries began trying to raise the price of coffee by once again withholding stock. Signatories agreed amongst other things to retain 20% of their stock when the price fell below US\$0.95 per pound (Brown et al., 2001).

The approach was plagued by difficulties, not least the non-compliance of some producer countries (The Economist, 2001b), the difficulties of physically storing the surpluses in producer countries, and the fact that consumer countries have high stocks of coffee. From the moment the scheme was inaugurated in May 2000, coffee prices continued to fall and Brazil threatened to leave the scheme if other producer countries did not pull their weight (The Economist, 2001a). In addition, there was the danger that if prices were to rise it could lead to a reduction in demand for coffee, especially in new markets, along with increased production as farmers sought to take advantage of the increase in international prices. At the end of September 2001 the ACPC retention scheme was abandoned (The Economist, 2001d).

There are now attempts to widen the access of smallholder coffee producers to insurance cover that provides some protection against price volatility. However, there are no serious attempts to actually reduce international price volatility directly (Brown et al., 2001). The insurance initiative launched by the World Bank's International Taskforce on Commodity Risk Management is, however, faced with many obstacles including farmers' inability to pay for the crop insurance and the logistics of administering such a scheme. Perhaps anticipating that the scheme is not going to get off the ground, the UK-based development charity, Oxfam, argues that if fair trade is to have a wider impact, it has to be brought out of the 'niche' market. Processing companies and supermarket chains should follow the example set by the fair trade movement and offer decent prices to coffee producers. But how likely is this when there is an over-supply of coffee?

Bananas provide an interesting example of current trade rules being stacked in favour of the transnational companies and the degree to which these companies will fight to maintain and expand their share of world markets. The EU is the biggest importer of bananas in the world, consuming some 35% of total exports. This is one reason why its policy concerning the banana trade has a strong impact on the pattern of production and trade. In the early 1990s, the EU sought to create an integrated market for bananas in Europe and to guarantee continued access to this market for the traditional African Caribbean and Pacific (ACP) countries. The result was Regulation 404/93. It used a system of licences, quotas and tariffs to limit cheaper imports from Latin America. Encouraged by the multinational companies, much of whose banana trade is located in Latin America, the US challenged the

European banana regime. The World Trade Organisation (WTO) insisted that the EU drop its preferential access for the ACP countries' bananas.

Regulation 404/93 also did few favours for the growing fair trade movement. The allocation of licences, based on past performances of the operators (mostly the transnational companies) considerably hampered the trade in fair trade bananas. Under Regulation 404/93, fair trade operators were classified as 'newcomers' on the market. As such, they could only access the 'newcomer category' which represented 8% of the total licences. In the first half of 2001, a new agreement was reached between the EU and US. The system of tariffs, quotas and licences has been modified with 83% of licences going to 'traditional operators' and 17% to 'non-traditional operators'. The allocation of licences to fill quotas is based on trade volumes between 1994 and 1996. The 'traditional operators' during this reference period were principally the banana companies. The new rules, therefore, still jeopardise the future of non-traditional operators such as those who buy from independent producers and those who trade in fair trade and organic bananas. To date, none of the fair trade operators has actually gone out of business as a result of the new regime but there is little or no room to grow (Chambron and Pfeifer, 2001).

What is lacking in the banana and coffee sectors is an enabling policy framework. It may be the case that coffee prices rise and that the demand for organic, fair trade and gourmet coffee increases. It may be the case that changes in the rules governing world trade tip the balance in favour of smallholder banana producers such as those in Cumandá but the salutary lesson is that the existence of a market *per se* is not enough (The Economist, 2001e). Under the Lomé Convention, for example, the EU gave preferential market access to ACP countries, but exports from these countries to the EU fell from £16 billion in 1985 to £14 billion in 1994 (United Kingdom Government, 2000:73). Farmers' associations in the Andes need both market access and (at least initially) access to credit along with technical and marketing assistance in order to take advantage of market opportunities.

External support

In terms of coffee, the examples of COCLA and Fundatierra are encouraging. There are other success stories in Latin America, notably the *Federación Nacional de Cafeteros* in Colombia, which represents almost 500,000 farmers and has been held up as a model for all aspiring coffee growers' organisations (Bentley and Baker, 2000). Experts, however, caution that the situation in Colombia is unique; the *Federación* was established in 1927 and has an unrivalled reputation. Aspiring coffee associations in the Andean region are unlikely to achieve the success enjoyed by Colombian coffee producers³. It is also important to note that Colombia's success has not been based on exploiting niche markets, it has come from a long-standing reputation for producing high quality coffee which attracts a premium of \$US0.10 per pound over other Arabica coffees (The Economist, 2001d). Furthermore,

the *Federación* is not isolated from the downturn in world coffee prices and producers are going out of business.

If farmers are not able to participate in externally-funded initiatives such as Fundatierra or already-established organisations such as COCLA, they need credit on favourable terms so that they do not need to sell their coffee to intermediaries. Coffee producers are no different to many smallholder farmers in Latin America in terms of lending institutions not being prepared to give credit to farmers. The supply of credit, especially from institutional sources, frequently depends on the borrower's ownership security and few farmers are able or willing to offer their land as collateral (Southgate, 1994). This reluctance may be greater among coffee producers, because due to the volatility of prices, coffee is such an uncertain asset. For example, international coffee prices tripled in the first six months of 1997 before losing half their value in the next six months. In addition, between January and December 2000, prices declined by 40% (Brown et al., 2001).

The need for external support is not confined to coffee producers. The Cumandá banana producers in Ecuador have received financial assistance from a European NGO to pay for the organic certification process and they secured the assistance of a group of Dutch volunteers to work with local farmers on the technical and marketing angles. The experience of banana associations on The Chapare region in Bolivia, illustrates the type of assistance that is needed if farmers are to work together and successfully take advantage of global markets (Hellin and Higman, 2000). A handful of farmers' associations has managed to secure a niche in the export market, predominantly to neighbouring Argentina, with assistance from United States Agency for International Development (USAID) (Box 7).

Transport infrastructure is often a major barrier to increased exports. Farmers affiliated to COCLA point out that the road from Quillabamba to Lima is so appalling that it costs US\$2000 to transport a container (approximately 32 tonnes) to Lima, the journey taking up to one week by truck. From Lima to Europe by ship

costs only \$900 per container. The situation would be dramatically improved were a section of railway between Quillabamba and Cusco reopened after the flood damage caused by *El Niño* in 1997, although government is grading the road from Cusco to the Pacific coast. As José Rivera of COCLA points out, coffee makes up 50% of Peru's agricultural exports, yet the producers receive no government support or assistance to make infrastructure improvements to promote exports. Furthermore the slump in coffee prices and coffee growers' pleas for aid coincides with a general economic downturn in which governments are cutting spending in order to reduce budget deficits (The Economist, 2001d).

Farmer empowerment

Development is a process of empowerment in which farmers learn to take charge of their lives and to solve their own problems by way of participation and innovation (Edwards, 1989). It is the opposite to the type of paternalism that is characteristic of many development efforts worldwide. As farmers participate in programmes, they often gain self-confidence, pride and the satisfaction of having made significant achievements (Bunch, 1982:28). The confidence that comes from participation increases their ability to learn and experiment. The ability to innovate is crucial because bio-physical, social and economic conditions continually change and farmers need to be able to adapt to these changing circumstances.

Globalisation places a premium on flexibility and adaptability, and those least able to respond to change are also likely to be those adversely affected by globalisation (Ellis and Seeley, 2001). The reality as recognised by The Fairtrade Foundation (1997) is that '*individual small farmers and...the cooperative ventures they embark upon, lack knowledge of the markets and the capacity to deal as equal partners in world trade...To regain control of their lives, farmers and their associations must become adept at financial planning and control, forecasting, deal making, logistics and quality control. In other words, they must become more business-like.*' These are skills needed by all farmers who wish to participate in global markets and not just those seeking an opening in niche markets.

Where do farmers learn these skills? Whilst indigenous knowledge is a powerful tool in meeting transformation costs, this type of knowledge has at times been romanticised (Sillitoe, 1998) and it is questionable whether it is sufficient to meet transaction costs (Kydd, 2001). This, therefore, raises the question about the extent to which farmers can take advantage of the opportunities of the global market without the type of external support afforded by organisations such as Fundatierra in Ecuador and USAID in the Chapare region in Bolivia.

Aid agencies can work with farmers and provide them with funds, empower them to varying degrees and make them more 'business-like', but they are unable to work this thoroughly with all farmers' associations. Are there other ways in which farmers acquire technical knowledge and business acumen? Can they do so via

Box 7 External assistance to banana producers in Bolivia by a USAID project

- Technical advice on growing high quality bananas.
- The consolidation of individual 10-15 ha holdings to form large blocks of over 100 ha. This facilitates aerial spraying against *sigatoka negra*.
- Training in administration, accounting and marketing.
- Provision of infrastructure, such as packing sheds, wells and cable lines.
- A six-month start-up incentive to the small banana-exporting companies of US\$ 0.25 per box of association-produced bananas.
- Advice on consolidating the agricultural activities of dispersed farmers into production and marketing centres, so that the farmers could reduce their costs through shared equipment and volume buying of agricultural inputs, and justify the expense of a permanent staff of administrators and marketers.

Source: Charles Foster, pers. com.

more conventional top-down extension approaches or through more participatory initiatives such as farmer field schools? And what chances are there that this knowledge can be disseminated by existing farmer-to-farmer networks?

Experience in Latin America with a range of participatory extension and research models such as Farmer Field School (FFS) and Local Agricultural Research Committees (CIALs) demonstrate that, by empowering farmers, they may provide them with some of the skills needed to compete more effectively in the global market (Hellin and Higman, 2001b). These participatory methods can stimulate local innovation and increase human and social capital because the emphasis is on principles and processes rather than recipes or technology packages (Braun et al., 2000). Farmers who participate in CIALs are learning how to manage funds, plan time, launch micro-credit schemes, prepare proposals to access external resources, and deal with outside agronomists and professionals on a more equal basis (Humphries et al., 2000; Sherwood et al., 2000).

Farmers' increased capacity for decision-making emerges from an iterative process of analysing a situation from different viewpoints, synthesising the analyses, making and implementing decisions, observing the outcome, and evaluating the impact (Braun et al., 2000). FFS and CIALs have the potential to contribute to an assisted process of problem-solving through which farmers learn more about sustainable land use *and* social development. Braun et al. (2000) report that an increasing number of CIALs have launched small businesses involving the production and marketing of seed, and selling fresh or processed food products. Suitably empowered, farmers are better able to influence formal research and extension systems and to access potentially useful skills, information and research products (Ashby et al., 1995; Wellard et al., 1990).

On-farm diversification

Faced with a continuation of low coffee prices, Oxfam (Brown et al., 2001) contends that the balance between supply and demand needs to be re-established through diversification out of the coffee sector. According to the laws of supply and demand this should happen automatically: declining coffee prices should lead to a decline in supply with fewer farmers continuing to produce coffee, and a subsequent increase in prices. This does not seem to have happened partly because the prices of alternative crops such as cocoa are often just as low and the production costs of the alternative crops may be higher.

In addition, coffee is often grown in South America on family-owned farms which are so dependent on the crop that they go on producing however low the price (The Economist, 2001b). With severe fluctuations in the price of coffee, producers often hope that the price will rise again, especially if the large producer countries, such as Brazil, suffer from devastating frosts. The costs of switching to other crops may be so high that farmers have no choice but to continue with coffee: the only real alternative may be to sell the land.

However, there have been recent reports that, faced with a downturn in the coffee market, some producers in Colombia and Peru are switching to the cultivation of coca (The Economist, 2001d; The Economist, 2001f).

There are economies of scale in accumulating transactions knowledge relevant to a particular product (Kydd, 2001). Banana producers in the Chapare region in Bolivia are being encouraged by USAID to take advantage of market opportunities by following the example of the more advanced banana associations and move away from atomised farm plots of a few hectares towards larger consolidated holdings (essentially monocultures). By consolidating the agricultural activities of dispersed farmers into production and marketing centres, the farmers can reduce their costs through shared equipment and volume buying of agricultural inputs, and justify the expense of a permanent staff of administrators and marketers. Development practitioners refer to these large blocks as potentially economically sustainable units. However, it is far from clear whether newer farmers' associations following this path can secure a niche in volatile domestic and international markets.

In addition, while large blocks of single species may, in some circumstances, be 'economically sustainable', are they 'environmentally sustainable'? Other development efforts in the Chapare stress the importance of agricultural diversification at the farm level. For example, a project funded by the United Nations Drug Control Program (UNDCP) promotes, at the farm level, diverse agroforestry systems incorporating licit agricultural crops. Although these may prove to be environmentally sustainable, can an agriculture based on diverse farm plots survive in the globalised economy?

5 CONCLUSIONS

Case studies from the coffee and banana sectors illustrate the way that farmers' participation in global markets involves a complex interlocking system of agricultural inputs, technical extension, packing, processing and marketing activities. The experience of banana and coffee producers in the Andes shows that whilst expanding global markets afford new opportunities, farmers are often disempowered and unable to capitalise on these opportunities. As a result, it is a handful of multinational companies that control and benefit from most of this trade. Faced with declining agricultural commodity prices, there are limits to the extent to which farmers can currently benefit from conventional global markets.

Globalisation is more likely to contribute to farmers' livelihoods if they can secure a niche in more equitable fair trade, organic and, in the case of coffee, gourmet markets. In order to do so they have to overcome a series of obstacles which are related more to transaction than transformation costs. Farmers face barriers to understanding and meeting requirements for quality, quantity and consistency of supply. To overcome these barriers they need new skills: business acumen, capacity for leadership and administration, negotiating skills and the ability to cooperate effectively with other farmers.

Only with new skills will smallholder farmers be able to identify and adapt to the requirements of niche markets.

As increasing numbers of farmers are trying to tap into niche markets, it is clear that these markets are not large enough to accommodate all aspiring participants. However, the skills which farmers need to access niche markets are also the skills that will enable them to compete more effectively in conventional markets. Globalisation places a premium on flexibility and adaptability, which these new skills can help provide (Ellis and Seeley, 2001).

As well as farmers' lack of essential skills, their ability to take advantage of growing conventional markets is hampered by a disabling policy environment. A stronger focus is needed on the transaction problems facing small farmers. An examination of the ways in which private and collective action can overcome these problems should underpin policies designed to help rather than hinder small farmers' access to markets (Kydd, 2001). An institutionalisation of the principles (and practice) of fairer trade is needed, with a deliberate focus on facilitating smallholder farmers' access to markets without unfairly supporting or subsidising them. This is the crux of the policy issue and is the type of assistance for farmers which is currently discouraged by international trade policies.

The implementation of policy changes at a national level will require development specialists to think beyond conventional sectoral or disciplinary boundaries and to identify interventions that meet the needs of smallholder farmers (Farrington, 2001; Pretty and Chambers, 1994). These include policies which aim to:

- develop farmers' associations as viable business units
- facilitate farmers' access to credit
- assist farmers in meeting social and environmental criteria for certification schemes
- improve basic infrastructure such as roads, packing sheds and processing machinery
- encourage and support trade fairs where smallholder producers are able to establish links with the market (Ramírez, 2001)

Extension and research agendas need to focus less on technology and transformation costs *per se* and more on farmer empowerment, capacity-building and the development of agro-enterprises. Farmers are more likely to learn new and appropriate skills via participatory extension and research methodologies such as farmer field schools. Extension which emphasises the skills needed for functioning in a global market is more likely to focus on:

- processes rather than outcomes
- developing flexible and adaptive behaviour in changing conditions, and
- empowerment of farmers, inspiring confidence in their own abilities

The reality is that the enhanced opportunities and risks associated with widening global markets mean that some farmers' precarious livelihoods will be made more vulnerable as a result of globalisation. Hence, it is necessary to embed support for agriculture in the wider context of rural development and to move away

from an exclusive reliance on agricultural development as a means of improving rural livelihoods (Maxwell et al., 2001). This is likely to entail additional public and private promotion of rural non-agricultural employment in industry and services (Berdegué et al., 2000).

REFERENCES

- Ashby, J.A., Garcia, T., Guerrero, M., Quirós, C., Roa, J. and Beltrán, J. (1995) 'Institutionalising farmer participation in adaptive technology testing with the CIAL'. *Agricultural Research and Extension Network Paper*, No. 57. London: Overseas Development Institute.
- Bates, R.H. (1997) *The political economy of the world coffee trade*. Princeton, New Jersey: Princeton University Press.
- Bebbington, A. (1997) 'Crisis and transitions: non-governmental organisations and political economic change in the Andean region'. *Agricultural Research and Extension Network Paper*, No. 76. London: Overseas Development Institute.
- Bentley, J.W. and Baker, P.S. (2000) 'The Colombian Coffee Growers' Federation: organised, successful smallholder farmers for 70 years'. *Agricultural Research and Extension Network Paper*, No. 100. London: Overseas Development Institute.
- Berdegué, J., Reardon, T., Escobar, G. and Echeverría, R. (2000) 'Policies to promote non-farm rural employment in Latin America'. *Natural Resource Perspectives*, No. 55. London: Overseas Development Institute.
- Braun, A.R., Thiele, G. and Fernández, M. (2000) 'Farmer field schools and local agricultural research committees: complementary platforms for integrated decision-making in sustainable agriculture'. *Agricultural Research and Extension Network Paper*, No. 105. London: Overseas Development Institute.
- Brown, O., Charvériat, C. and Eagleton, D. (2001) *The coffee market - a background study*. Oxford: Oxfam.
- Bunch, R. (1982) *Two ears of corn: A guide to people-centered agriculture*. Oklahoma: World Neighbors.
- Chambron, A-C. (2000) 'Straightening the bent world of the banana'. <http://www.bananalink.org.uk/trade/btrade.htm>
- Chambron, A-C. (1999) 'Bananas: the TNC's Green Gold', in *Hungry for power: The impact of transnational corporations on food security*. London: UK Food Group, pp. 46-65.
- Chambron, A-C. and Pfeifer, R. (2001) 'EU import regime for bananas: Impact of the July 2001 reform on market operators'. London: EUROBAN (1st draft).
- Crook, C. (2001) 'Globalisation and its critics: a survey of globalisation'. *The Economist*, September 29th 2001.
- Edwards, M. (1989) 'The irrelevance of development studies'. *Third World Quarterly*, Vol. 11, No. 1, pp. 116-35.
- Ellis, F. and Seeley, J. (2001) 'Globalisation & sustainable livelihoods: an initial note'. Background briefing. Department for International Development.

- FAO (1999a) 'The market for 'organic' and 'fair trade' bananas'. Intergovernmental group on bananas and on tropical fruits. <http://www.fao.org/docrep/meeting/X1149E.htm>.
- FAO (1999b) 'The impact of banana supply and demand changes on income, employment and food security'. Intergovernmental group on bananas and on tropical fruits. <http://www.fao.org/docrep/meeting/X1390E.htm>.
- FAO (2001a) 'Coffee projections to 2005'. www.fao.org/es/esc/esce/escr/coffee/coffeePe.htm.
- FAO (2001b) 'Coffee: commodity notes'. www.fao.org/es/esc/esce/cmr/cmrnotes/CMRcofe.htm.
- Farrington, J. (2001) 'Sustainable livelihoods, rights and the new architecture of aid'. *Natural Resource Perspectives*, No. 69. London: Overseas Development Institute.
- Gibbon, P. (2001) 'Agro-commodity chains: an introduction'. www.odi.org.uk/speeches/gibbon.pdf
- Glover, D. (1983) 'Contract farming and the transnationals'. PhD dissertation, the University of Toronto.
- Guba, E.G. (1981) 'Criteria for assessing the trustworthiness of naturalistic inquiries'. *Educational Communication of Technology Journal*, Vol. 29, No. 2, pp. 75–91.
- Hellin, J. (2001) 'Banana farmer with a bunch of ideas'. *The Guardian Weekly*, Vol. 64, No. 25, p. 20.
- Hellin, J. and Higman, S. (2000) 'Substituting alternative crops for coca: a viable alternative for farmers?' *Appropriate Technology*, Vol. 27, No. 4, pp. 10–13.
- Hellin, J. and Higman, S. (2001a) *The impact of the multinational companies on the banana sector in Ecuador*. Oxford: Oxfam.
- Hellin, J. and Higman, S. (2001b) 'Competing in the market: Farmers need new skills'. *Appropriate Technology*, Vol. 28, No. 2, pp. 5–7.
- Hubbard, M., Herbert, A., and de la Touche, Y.R. (2000) 'Final report – Evaluation of EU assistance to ACP banana producers'. Taastrup, Denmark: Eva-EU Association.
- Humphries, S., Gonzales, J., Jimenez, J. and Sierra, F. (2000) 'Searching for sustainable land use practices in Honduras: lessons from a programme of participatory research with hillside farmers'. *Agricultural Research and Extension Network Paper*, No. 104. London: Overseas Development Institute.
- Kydd, J. (2001) 'Globalisation, technical change, and economies of scale: can small farms survive – and if not, what should be done about it?' www.odi.org.uk/speeches/summer2001_2.html
- Liddell, I. (2000) 'Unpeeling the banana trade'. London: The Fairtrade Foundation.
- Logli, P. (2001) 'What future for fair trade?' *ACP-EU Courier*, Issue 181, pp. 63–6.
- Maxwell, S., Urey, I. and Ashley, C. (2001) 'Emerging issues in rural development'. *Workshop paper*. London: Overseas Development Institute.
- Moriset, J. (1997) *Unfair trade? Empirical evidence in World commodity markets over the past 25 years*. Washington D.C: The World Bank.
- Pretty, J.N. and Chambers, R. (1994) 'Towards a learning paradigm: new professionalism and institutions for agriculture' in I. Scoones, and J. Thompson, (eds) *Beyond farmer first: Rural people's knowledge, agricultural research and extension practice*. London: Intermediate Technology Publications, London, pp. 182–202.
- Pretty, J.N., Guijt, I., Thompson, J., and Scoones, I. (1995) *A trainer's guide to participatory learning and action*. London: International Institute for Environment and Development.
- Ramirez, L. (2001) 'Globalisation and livelihood diversification through non-traditional agricultural products: the Mexico case'. *Natural Resource Perspectives*, No. 67. London: Overseas Development Institute.
- Sherwood, S., Nelson, R., Thiele, G. and Ortiz, O. (2000). 'Farmer field schools in potato: a new platform for participatory training and research in the Andes'. *Newsletter of the Centre for Research and Information on Low External Input and Sustainable Agriculture (ILEIA)*, Vol. 16, No. 4, pp. 24–25.
- Sillitoe, P. (1998) 'The development of indigenous knowledge'. *Current Anthropology*, Vol. 39, No. 2, pp. 223–52.
- Silverman, D. (1993) *Interpreting qualitative data: Methods for analysing talk, text and interaction*. London: Sage Publications.
- Southgate, D. (1994) 'The rationality of land degradation in Latin America: some lessons from the Ecuadorian Andes' in T.L. Napier, S.M. Camboni, and S.A. El-Swaify, (eds) *Adopting conservation on the farm: An international perspective on the socioeconomics of soil and water conservation*. Ankeny, Iowa: Soil and Water Conservation Society, pp. 331–40.
- Striffler, S. (1999) 'Wedded to work: class struggles and gendered identities in the restructuring of the Ecuadorian banana industry'. *Identities – global studies in culture and power*, Vol. 6, No. 1, pp. 91–120.
- Tallontire, A. (2000) 'Partnerships in fair trade: reflections from a case study of Cafédirect'. *Development in Practice*, Vol. 10, No. 2, pp. 166–77.
- The Economist (2001a) 'Commodity Price Index'. *The Economist*, January 27th 2001, p. 146.
- The Economist (2001b) 'Coffee: trouble brewing'. *The Economist*, March 10th 2001, pp. 114–5.
- The Economist (2001c) 'Central America: small, vulnerable – and disunited'. *The Economist*, August 11th 2001, pp. 44–5.
- The Economist (2001d) 'Drowning in cheap coffee'. *The Economist*, September 29th 2001, pp. 67–8.
- The Economist. (2001e) 'Zero-sum?' *The Economist* March 3rd 2001, p. 105.
- The Economist (2001f) 'Changing the plan'. *The Economist*, September 8th 2001, pp. 10–11
- The Fairtrade Foundation. (1997) 'Spilling the beans: what is wrong with the banana trade?' www.fairtrade.org.uk/spillf.htm.
- United Kingdom Government. (2000) 'Eliminating world poverty: making globalisation work for the poor'. London: Department for International Development.

- van de Kastelee, A. (1998) 'The banana chain: the macro economics of the banana trade'. <http://www.bananalink.org.uk/trade/btrade.htm>.
- Wellard, K., Farrington, J. and Davies, P. (1990) 'The state, voluntary agencies and agricultural technology in marginal areas'. *Agricultural Research and Extension Network Paper*, No. 15. London: Overseas Development Institute.
- Wunder, S. (2001) 'Ecuador goes bananas: incremental technological change and forest loss' in A. Angelsen, and D. Kaimowitz, (eds) *Agricultural technologies and tropical deforestation*. Wallingford: CAB International, pp.167-95.

Endnotes

- 1 Non-payment of the minimum price is not a recent development. In the early 1980s, Glover (1983:366) questioned the degree to which Ecuadorian banana exporters observed the minimum price.
- 2 The Ecuadorian government introduced a minimum price of \$2.90 per box on January 1st 2001. Once again few exporting companies are paying producers this amount.
- 3 Robert Simmons, pers. comm. Head of coffee and cocoa research, LMC International Ltd.

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