# Case Study of the Coffee Sector in Mexico

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This is a study of the coffee sector in Mexico, with special reference to that sector in the state of Chiapas. We offer a macro-economic and general analytic framework, and complement that with family-level case study exemplary details. Our intention is (1) to provide a profile of the social conditions, and the organisational initiatives of the peasant coffee producers in Chiapas, (2) to identify the national and international economic and political forces that impact on the lives of the small producers, and (3) to delineate policy recommendations originating particularly in the small-producer coffee organisations.

## 1. Overview

In the study of Mexico's coffee sector, one finds the key components of the national search for an economic model and the great themes associated with the social integration of the modern nation-state. Agrarian exports – whether indigo, meat, or fruits and vegetables – have been a fundamental aspect of economic growth since the Colonial period and coffee first achieved prominence in the late 18<sup>th</sup> Century, with the center of production in the states of Veracruz and Oaxaca. By the middle of the 19<sup>th</sup> Century, German and Italian farmers, many with previous experience in Guatemala, established themselves along the Pacific Coast plateau of Chiapas, introducing plantation-style coffee farms which depended on the cheap contracted labor of Mayan Indians whose families lived in the traditional communities of the Chiapas Highlands.

If Mexico's economic history is one of seeking – and finding – release from dependence on agriculture, its social history is marked by the (still elusive) equitable incorporation of the largely Indian peasantry into the national body politic. This is a framework for appreciating many of the landmarks of Mexican history. With the liberal reform of the mid-19<sup>th</sup> Century, the government wrested control of large tracts of land from the Catholic Church, on the one hand, and from collectively-franchised Indian communities, on the other. Then, as payment for their crucial role in the Mexican Revolution (1910-1920), peasants were rewarded with the return or new entitlement of lands, in an agrarian reform programme which broke up many of the large haciendas. Indeed, it was with the take-over by peasants of the Veracruz and Oaxaca coffee plantations that smallholder coffee production began in Mexico (Hernández, 1996).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> At the global level, coffee has become increasingly a strategy of small farmers. In the 1970-80s, the FAO estimated that 12% of coffee consumed was bought from smallholders; more recently that figure has jumped to 40% (largely due to increases in coffee production in the African nations). (Renard 1999: 187)

The post-revolutionary land reform was based on a concept of "social property", distinct both from private property and public lands. Traditional Indian territories were restored as "*comunero*" lands and newly-awarded peasant (usually Indian) lands came in the form of "*ejidos*". These were non-alienable collective landholdings, which in practice came to include commons and individually-controlled house plots and fields. It was not until the latter part of the 20<sup>th</sup> Century that Chiapas followed the national example of land redistribution, combining the break-up of latifundia with the opening, or "colonization", of national lands – particularly at the expanses of the Lacandon Jungle and Cañadas region in the eastern part of the state. The hired hands on the coffee *fincas* brought coffee beans back in their pockets, planted them at home, in the Highlands and northern part of the state (when the altitude was not too high), and carried the coffee with them when they migrated to the lowland-mountain rainforests of the Cañadas. (Ordóñez; Pérez-Grovas, 1998)

Mexico's industrial take-off (mid 1940s – 1970s) was funded in large measure by redirected surplus value from the agricultural sector. As a result of these unfavorable internal terms of trade, the proportion of the population in the rural sector was in steady decline, arriving at something over a third of the total population by the end of that period (and a quarter, by the end of the century). With the discovery of massive oil reserves in the 1970s, and attempting to curtail increasingly militant social discontent, including among the peasantry, the government increased spending in rural social programs and opened or expanded state-run agricultural initiatives in the 1970s and 1980s.

One of the most successful of these initiatives was that of the Mexican Coffee Institute (Instituto Mexicano del Café, or INMECAFE)<sup>2</sup>. The crop made sense, as coffee was ideal for mountainous zones – a characteristic of the traditional Indian refuge zones – and required small capital investment. Offering plants and forward financing, technical assistance, and a guaranteed market, INMECAFE promoted very strong peasant entry into the coffee sector. The land area devoted to coffee spread dramatically.<sup>3</sup> Of the total production in Mexico in the 1990s, 66% came from producers with holdings of less than 10 hectares, and 45% from those with less than five hectares. In the Mexican Southeast<sup>4</sup>, 82% of the farmland planted in coffee was owned by those with less than five hectares in total, and 69% were peasants with less than two hectares of land. (Celis, 2000; Sagar, 1999)

It should be noted that, until 1990, coffee was the third greatest source of foreign exchange (after petroleum and automobiles), representing 3% of total exports, and 42% of total

<sup>&</sup>lt;sup>2</sup> INMECAFE was a federal government program created in 1971 with the mandate to promote and control coffee production and sales, through investigation, technical assistance, financing, industrial processing, and export. INMECAFE was phased out from 1989 to 1992. INMECAFE was the culminating moment of government intervention in the sector, which began with the creation of the National Coffee Commission (Comisión Nacional del Café) in 1949. (Santoyo, et al., 1994)

<sup>&</sup>lt;sup>3</sup> In Chiapas, for example, coffee was produced on 17,000 hectares in 1977, and on 50,000 in 1988. (Instituto Maya, *Gran Visión*, 1999) Needless to say, this included expansion into lowland areas entirely inadequate for the production of high-quality coffee.

<sup>&</sup>lt;sup>4</sup> This is the southern horn of México, including Oaxaca, Yucatán, and the states in between. The largest Indian and the largest peasant populations reside in the Southeast.

agricultural exports. In recent years, coffee has brought in some US\$800,000,000 in foreign exchange annually.

This "golden era" of coffee was due in no small measure to the international market controls agreed by producer and buying countries and administered by the London-based International Coffee Organisation (ICO). During the years of this quota system (1962-1989), INMECAFE was by far the principal buyer and exporter in Mexico (compared to private national and international agents). (Renard, 1999) However, the ICO accords broke down in 1989, largely as a result of the liberal-principaled withdrawal of the United States and other large consuming countries; with enormous world stocks, coffee prices duly fell, even by more than half – to US\$0.50/pound, at one point in 1992 –, and never to recuperate to previous levels. Meanwhile the Mexican government, consistent with its own overall neo-liberal economic policy, determined to curtail state intervention in the sector, and sold off INMECAFE's tangible holdings, including, most prominently, the industrial processing plants (*beneficios secos*).

This sudden collapse of the state-controlled, production-processing-marketing pyramid exposed small producers to the vagaries and easy exploitation common in other commodity markets. Without transport, without processing facilities, without financing, and without knowledge of markets, a Mexican peasant coffee producer did well to sell his green coffee bean harvest (the pulp broken down and sun-dried, at his house) to the intermediary (*coyote*, in local parlance) – or the first of the chain of intermediaries – who had a vehicle and could pay cash. The negotiations tended to be one-sided. (Even the scales were unjust, according to many peasants' first-hand experience.)

On the other hand, for the intermediaries (all those between the producers and the consumers) rather spectacular profits were to be had. The retail price of coffee has not declined. Rather, promotional costs rise, corresponding to greater brand competition. And the market has segmented, with quality and other characteristics opening niches, in which, too, providence of the product has taken on markedly increased importance. What was once a market with such simple distinctions as ground beans/instant/decaffeinated now includes gourmet/organic/fair trade/denomination of origin.

Naturally, coffee lost its previous importance as an export product. By 1993, it represented only 0.55% of export earnings, and 14.55% of agricultural earnings. Roughly 280,000 families still depended on its production for income. But, without the means to purchase inputs (fertilizers, pesticides, renewal of plantations), productivity per hectare slumped (from 12 to 6.3 "*quintal*"<sup>5</sup> sacks, from 1989 to 1993), and indeed, farmers left off harvesting altogether (of the 760,000 hectares planted in coffee, 560,000 were harvested in 1993), simply because it didn't pay, when prices were under a dollar a pound. (Renard 1999, 267).

<sup>&</sup>lt;sup>5</sup> The international conventions for weighing coffee are complicated. A quintal is 100 pounds (46 kilos) of green coffee. If the coffee is not fully processed (and therefore in the "green coffee" state), it may be in the form of semi-processed "parchment" coffee, or in unprocessed "cherry" form. A quintal of parchment coffee is equal to 57.5 kilos, being the quantity of parchment coffee that, once processed would be equal to the 46 kilos of green cofee. A quintal of coffee cherries is equal to 250 kilos. Thus the weight of a quintal depends on the form in which the coffee is found.

During this transition, the agro-industrial marketing and processing chain suffered modifications which transferred advantages to the larger international corporations. National operators were hampered by their limited access to credit while the great international trading companies – quickly taking over their bankrupt smaller cousins – were recipients of vast loans. (In 1989, E.D.&F. Man obtained a credit of US\$250,000,000, from a consortium of 23 banks.<sup>6</sup>) The transformation industry (toasted, dehydrated or "instant", or decaffeinated coffee) moved toward oligopoly, dominated by Philip Morris, Nestlé, Sara Lee and Proctor & Gamble.<sup>7</sup> By the end of the century, four international corporations handled 70% of the coffee industry in the OECD countries.<sup>8</sup> Of course, the liberalised international coffee market has reinforced the buying and sale of futures and hedging; the increasingly speculative nature of the market has increased the insecurity of small producers and, in high markets, has reduced the proportion of profit destined to that (initial) link in the chain.

Remarkably, in repeated instances, particularly in the states of Oaxaca, Chiapas, Guerrero y Veracruz, many peasant producers, together with a handful of committed agronomists and other professionals, responded to the crisis provoked by INMECAFE's demise by creating grassroots organisations, cooperatives and other types of producer-owned or "social" enterprises. These social organisations of small-scale coffee producers evolved a menu of strategies – the collective purchase and running of processing plants and ware houses, technical assistance, some financing, collective sales of their product even eventually exporting directly – and a tiered network, operating independently of the government (though, of course, establishing relations, lobbying for policies favourable to the small producers, and sometimes receiving funding under various programmes).

The National Coordinator of Coffee Organisations (Coordinadora Nacional de Organizaciones Cafetaleras, CNOC), formed in 1989, represents interests of the independent coffee sector in negotiations with the government and provides information and coordinates strategies, at the national level, of over 25 independent coffee organisations in the country. It thus represented almost 70,000 small-scale coffee producers (about 35% of the national total) in the states of Chiapas, Veracruz, Oaxaca, Guerrero, Puebla, Hidalgo and San Luis Potosí. CNOC attempted, in two initiatives, to facilitate the marketing of members' coffee, in order for small producers to obtain greater profits. The *Promotora de Cafés Suaves Mexicanos*, employing the marketing information service of Reuters, offered constantly-updated pricing, volume and other information on the international market to member organisations attempting to gain entrance into the export market. It also attempted to facilitate contracts directly with international buyers. The second CNOC enterprise, Aztec Harvests Coffee Company, exported and wholesaled coffee from four CNOC member organisations (from Chiapas, Guerrero, and Veracruz) through its California, United States-based office. Aztec Harvests suffered from a lack of assured, quality

<sup>&</sup>lt;sup>6</sup> Renard 1999: 147.

<sup>&</sup>lt;sup>7</sup> Consumers in developed countries have seen steady prices – or at most a reduction of 10%, while producers have seen their selling price of the raw material decline by half, since 1989. The Mexican government did open an investigation, in 2000, regarding "disloyal" competition on the apart of major exporters in the country. Two of the cases are still pending. (Roberto Juárez, 2001) <sup>8</sup> *Ibid*: 151.

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product, under-financing, and organisational struggles, and closed its doors in 1995. The experience also taught CNOC of the complexity of a third-tier social organisation, obliged to respond to a diverse membership, trying to act in a timely fashion in the commodities market. Not easy.

CNOC affiliates have developed with impressive success various state-level second-tier organisations. CEPCO, in Oaxaca, is doubtless the most consolidated. And COOPCAFE, in Chiapas – allied, for reasons of their similar paths, with CEPCO – is among the most dynamic state-level CNOC affiliates. Belonging to COOPCAFE are 32 local coffee organisations of various sizes and level of consolidation, with a conglomerated total of some 15,000 small-producer beneficiaries.

The coffee market has been marked by great volatility since the demise of the international coffee accord, and by a distinct trend toward declining prices. The causes for this are found on both the demand and supply sides of the equation. Worldwide, the consumption of coffee is not growing significantly; technical innovations have permitted processors to reduce their need of the raw material per toasted, milled pound of coffee; and innovations in communications give distributors the advantage of buying quantities on a short-term "just-in-time" basis. At the same time, in addition to large existing stocks, world production is increasing – particularly with the strong entry of Vietnam into the market. Voluntary controls on the part of producers have proved unsustainable. Mexican coffee consistently suffers a 5 to 10 point discount on the New York market due to the uneven quality of Mexican coffee in general.<sup>9</sup> Prices rose in 1994, but dropped precipitously again in 1998, and have remained at historic lows for most of the period since. Lamentably, Mexican small-scale producers have actually sold coffee at prices lower than their costs, both in much of the period of 1989-1993 and 1999 to the present.<sup>10</sup> It is widely projected that coffee prices could remain in this slump until 2003-2005.

Coffee-exporting countries have recommended a price of US\$1.20/pound to cover costs and a reasonable profit and it was recommended (in the Second General Assembly of Producers in 1992) that organic coffee receive a US\$0.15/pound premium. (Renard 1999: 196)

Various small-producer organisations – particularly among the Indian populations in Oaxaca and Chiapas – have developed innovative strategies, including the niche markets of organic coffee, fair trade, and to a lesser extent denomination of origin.<sup>11</sup> Less developed are strategies to diversify out of coffee, though some coffee organisations are experimenting with this in various ways.

<sup>&</sup>lt;sup>9</sup> The end of international regulations and quotas has permitted processors to more finely select the type and quality of coffee they need and, as a result, the price differentials according to quality have greatly increased since the end of the International Coffee Accord. Whereas before the price range averaged some 50% (a high quality receiving half again the price of the poor-to-average stuff), now a sought-after product might achieve a price from 100% to 700% higher than the lower quality coffee. (Renard 1999:140)

<sup>&</sup>lt;sup>10</sup>In section 1.2. below, the coffee prices are analyzed.

<sup>&</sup>lt;sup>11</sup> Thirty-five coffee organisations are recognized by the Fair Trade Labeling Organisation (FLO), though not all sell organic coffee, and some sell only small quantities.

#### **General Characteristics of the Coffee Market**

"Arabica" and "robusto" are the two types of coffee sold on the international market. Latin America is principally a producer of arabica (though robusto is found in Brazil and Ecuador) while Africa is principally a producer of robusto. Robusto has more caffeine and a sharper taste, and sells for roughly half the price of arabica. Depending on the manner of processing, arabica is classed as "washed" or "un-washed", the former using water to remove the pulpy fruit from the bean. Mexican coffee is washed, and is known as an "otro suave" (contrasting to the "Colombian suave" – which has its own market niche).

In the world, some 100 million sacks of coffee beans (of 100 lbs. or 60 kilos) are produced yearly. Brazil is the major producer – with the distinction of suffering highly variable weather and not-infrequent frost and drought. Colombia, Indonesia, Vietnam and Mexico follow. In contrast to the unpredictability of the Brazilian climate, other production factors – the non-perishable nature of the product and the long-term investment required<sup>12</sup> – keep the total offer of coffee relatively constant, in the short term.

Consumption of coffee is also quite inelastic to price change – though it does vary according to changing cultural patterns. If the United States was the principal buyer of coffee on the world market (45% in 1965), it is now down to 25%; Europe is up to 40%; and Japan is at 7% and increasing its consumption per capita.

These qualities made coffee a relatively easy market to regulate during the years of the International Coffee Organisation. But the secular increase in world production led to a collapse of the price when that lid was removed. And the already-mentioned climatic variables of the few, largest producers have created a volatile market indeed in recent years.

## Major producing regions

Coffee production is found in 12 of the 32 states of Mexico, five of which are major coffee producers: Chiapas, Oaxaca, Veracruz, Puebla and Guerrero. In general geographenvironmental terms, we can speak of two mega-regions: (a) the Pacific Slope (including all of Chiapas), which is responsible for 75% of the production and (b) the Gulf of Mexico slope for 25%, as represented in the map below.

<sup>&</sup>lt;sup>12</sup> The coffee tree only becomes fully productive in its sixth year. Therefore, producers do not easily move in or out of the market.



Production data are presented in the following charts.

State	1990	1991	1992	1993	1994	1995	1996	1997
Chiapas	165,000	266,790	231,329	231,329	231,328	231,328	231,329	231,329
Oaxaca	186,752	189,300	189,500	180,500	180,575	180,374	183,106	180,239
Veracruz	132,093	149,057	140,887	141,887	152,438	152,438	152,993	150,187
Puebla	64,752	72,440	65,240	70,176	63,357	67,390	67,825	67,825
Guerrero	38,515	35,818	39,658	38,783	39,230	40,366	39,040	39,584
Otros	113,322	72,496	110,617	94,784	92,974	95,995	93,216	91,808
Nacional	700,444	785,901	776,925	757,423	759,902	767,891	767,509	760,972

# Area of coffee cultivation (in hectares)

(from Centro de Estadística Agropecuaria. Claridades Agropecuarias: SAGAR 1999

Today there are approximately 780,000 hectares planted in coffee. There are some 250,000 small-scale coffee producers, 185,000 of whom are Indian (principally in the states of Chiapas, Oaxaca, Puebla and Guerrero).

State	Production	Percentage of national production
Chiapas	1,573,390	32.8
Veracruz	1,392,381	29.0
Puebla	820,247	17.1
Oaxaca	490,220	10.2
Guerrero	202,747	4.2
Other 7 states	321,915	6.7
Total	4,800,900	100

#### Coffee production, 1997-98 (in 60 kilo sacks)

from Centro de Estadística Agropecuaria. Claridades Agropecuarias. SAGAR 1999

Fully three-quarters of Mexican coffee is "*prima lavado*" (prime washed), grown at an altitude of 600-900 meters, and considered of medium-to-lower medium quality in international markets, normally selling at a discount of 5-10 points. The rest, *café de altura* (highland coffee), is grown at 900-1,200 meters and receives a better-than-average price on the international markets. The same may be said of coffee from regions recognized for the high quality of their production, such as Pluma Hidalgo in Oaxaca and Cuxtepec in Chiapas.

On the Gulf of Mexico slope, lack of sun requires growers to transport the coffee cherry to be hulled and dried from the plantations to the processing plants; this is, on average, 50 kilometres. On the Pacific slope, on the other hand, the "wet hulling" is done in small mills and dried on patios at the family household level. The dried bean can be used directly, as a natural coffee, also known as "*café capulín*". For better quality, it must be finished at a drying plant, or "*beneficio seco*", which are usually within about 30 kilometres from the plantations.

The majority of the *beneficio seco* processing plants are owned by the 10 largest companies (controlling 63% of total exports), while 197 smaller enterprises – including smallholder-owned cooperatives – control the remaining 37% of total exports. (SAGAR 1999)

Coffee is exported either by sea or land. The major ports are Veracruz and Salina Cruz, Oaxaca, destined for Europe, the United States or Japan. The distance from processing plants to the ports is, on average, 250 kilometres. Coffee also enters the United States via Nuevo Laredo, Tamaulipas, transported, by rail or truck, on average, 1,200 kilometres, from the point of departure of the processing plants.

Mexico is the world's largest producer of organic coffee: some 90,000 60-kilo sacks, or 20% of the total market. It was the private farm, "Irlanda", in the Soconusco zone of Chiapas which first obtained organic certification in Mexico, in 1967. Other private coffeeproducers followed, but the strategy was principally picked up by peasant organisations and associated non-governmental organisations – initially linked to the Catholic Church. The Unión de Comunidades de la Región del Istmo (UCIRI) in Oaxaca first consolidated an alternative organic coffee production and marketing strategy; the Chiapanec organisation, Indígenas de la Sierra Madre de Motozintla (ISMAM) followed; and the strategy was subsequently reproduced by a broad array of coffee organisations. The premium from organic coffee varies greatly depending on the price for conventionally-grown coffee, and may be on average at least 10% over the regular price of coffee. Much of this coffee is now also marketed through fair-trade schemes, which perhaps averages an additional 3% premium over the regular cost of coffee. (Instituto Maya 1999)

### Importance of the coffee sector in national and regional economies

Coffee has been, until recently, the most important agricultural source of foreign exchange in Mexico, though it is fifth in terms of area cultivated (after corn, beans, wheat and sorghum). In 1999, coffee exports brought the country some US\$800,000,000, which was 17.71% of the total of agricultural exports (versus 26.51% represented by fresh vegetables). The coffee harvest generates 500,000 jobs, and it is estimated that some 3,000,000 persons are employed in activities related to coffee production, processing and sales – which is approximately 6% of the economically-active population of Mexico – and close to a quarter of the economically-active rural population. It is estimated that in the southern coffeeproducing states, coffee offers some 52% of the rural economically-active population employment. (Pérez-Grovas 1998; Instituto Maya, *Gran Visión*, 1999)

In the state of Chiapas, some 500,000 persons find work in the coffee sector. Coffee is only second to corn in terms of agricultural production measured in area. It is the principal export crop of the state, and the major source of income for almost 25% of the economically-active population. (*Plan de Gobierno 2000-2006. Eje Desarrollo Económico de Chiapas*)

## Export destination

Mexico exported coffee to 58 countries in the 1997-98 harvest, with the greatest part – some three-quarters – going to the United States. Turning to the 1994-95 harvest, the distribution was the following:

Country	Sacks (60 kilos)
United States	2,773,826
Germany	259,028
South Korea	97,858
Canada	79,049
Japan	54,981
Belgium	43,234
Israel	24,176
Other countries	353,222
TOTAL	3,685,476

FONAES 1996, with information from the Consejo Mexicano del Café

The United States' is a natural market for Mexican coffee – virtually all of it exported in the form of green coffee.<sup>13</sup> Land transport is cheaper than transport by sea. The US market seeks the "other milds" quality more than the European market (which buys more of the "Colombian milds").<sup>14</sup> Nevertheless, upon eliminating its tariffs on Mexican coffee, exports to Europe have grown impressively – from 16% of the 1995-96 harvest to 22% of the 1997-98 harvest. Germany, France, Holland and Belgium doubled their level of imports from one year to the next! This is evidence of the high quality of the Mexican product being more widely recognised. In sum, Mexican coffee is better positioned now than in any period since 1989. Europe is evidently opening up, and, with regard to the United States, the decline in coffee consumption appears to have bottomed out, while consumption of speciality coffees is increasing pronouncedly, reaching levels similar to that in Europe.<sup>15</sup> (Instituto Maya 1999; 57)

Туре	Volume	Value
	(60 kilo sacks)	(US\$ thousands)
Prime washed	2,357,751	461,375
Altura	587,721	121,422
Prime washed decaffeinated	194,125	42,759
Instant	182,061	31,944
Prime washedorganic	131,286	27,339
Altura organic	94,991	22,087
Well washed decaffeinated	75,010	15,846
Desmanche	63,147	7,469
Extra prime washed	42,665	8,431
Altura decaffeinated	42,027	10,216
Robusta washed	21,646	3,034
Toasted and ground	15,286	4,395
Robusta washed, decaffeinated	11,578	1,740
Well washed	11,183	1,881
Other naturales	10,852	1,538
Natural Atoyac	8,986	1,431
Instant decaffeinated	7,719	2,102
Altura Márago	5,314	1,393
Toasted, ground, decaffeinated	4,551	1,617
Others	14,162	2,734
Total	3,882,121	770,753

#### Following is a breakdown of the types of coffee exported (1997-98):

SAGAR, 1999, Consejo Mexicano del Café. Claridades Agropecuarias

In 2001, five major exporting companies are responsible for half of the total volume of coffee exported, while the other half is in the hands of some 30 medium-sized companies.

<sup>&</sup>lt;sup>13</sup> Indeed 95% of the coffee exported from Mexico is in the form of green coffee. And only 4-5% of the instant coffee processed in the country is for export. (Pérez-Grovas; Roberto Juárez, interview, July 2001)

<sup>&</sup>lt;sup>14</sup> The three most important US buyers are: General Foods (Philip Morris), Folger's (Procter and Gamble) and Nestlé.

<sup>&</sup>lt;sup>15</sup> In 1997, there were 80 million consumers of espresso, latte, cappuccino or iced/cold coffees in the US (35% of the popuation). In 1998, this number jumped to 108 million. (Rice and McLean, 1999, 19 SAGAR, 1999, Consejo Mexicano del Café. Claridades Agropecuarias, 19)

It should be noted that producer organisations compete with the buyers of transnational companies for the purchase of coffee, and at a disadvantage. That is, the private buyers normally have the capacity to pay the full amount at the moment they obtain the coffee, while the cooperatives often pay a first instalment upon receiving the coffee, and only conclude payment upon receipt of funds from the final buyer (usually in a foreign country). It is easy to see why short-term credit is crucial to the organisations' functioning in this regard.

#### Domestic consumption of coffee and basic features of the national market

Among coffee-producing countries, Mexico has one of the lowest rates of domestic consumption. Between 900,000 and 1,000,000 60-kilo sacks, or about 15% of the national production, is purchased domestically -- with no significant tendency of growth in the last eight years. Consumption is now between 650 and 730 grams per person per year.<sup>16</sup> (Van der Balk 1992; FONAES 1996; SAGAR 1999)

Atypically to much of the rest of the world, consumption of instant, or soluble, coffee in Mexico continued to rise in the last two decades of the last century, and now accounts for more than 70% of the coffee consumed. Regarding toasted coffee, only 26% is truly pure, and the rest contains some degree of substitutes. Some 30% of the instant coffee sold is decaffeinated, as well. Nestle sells 80% of the instant coffee consumed in Mexico. General Foods is the distant second wholesaler. (Van der Balk, 1991; Sontaoyo et al., 1994; Instituto Maya 1999, 61)

Unfortunately, it's reported that almost three-quarters of the rest of the coffee – toasted and ground – sold in Mexico is actually a mix of coffee with sugar (El Marino being the chief brand of this "*café mezclado*"). The *Ley de Torrefacción* (legislation of coffee) allows a product with up to 30% of substitutes to still be labeled "100% pure".

And yet, surely, the statistics do not capture fully what is an evident boom (not dissimilar to that in the United States) of gourmet coffee, often sold locally by small-scale retailers, and frequently promoting organic and fair-trade aspects (features which are discussed below).

## **Coffee imports**

There was virtually no importation of coffee into Mexico during the years in which INMECAFE regulated the market, in general. Mexican exporters were obliged to supply the local market first. Imports have risen from 260,000 sacks in 1998-99 to 350,000 in 1999-2000 – which is almost 8% of Mexican exports!

The greatest part of this imported coffee is of the "*robusta*" class. Normally, 30% of the mix that goes into the making of instant coffee is *robusta*. The largest importer of coffee

<sup>&</sup>lt;sup>16</sup> Compare with per-person consumption in the Scandinavian countries, 10 kilos; with US-Canada, 4-5 kilos; or even with Brazil and Colombia, 2 kilos.

into Mexico is Nestlé, which uses the primary material for its instant coffee. Nevertheless, there are concerns on the part of the Mexican coffee organisations that some of this imported coffee is making its way into the domestic market. (CEPCO 2000)

The importation of this coffee is also of questionable legality for its additional reliance on a new – and technically nonsensical – category, "semi-toasted coffee", recently added to Mexican import regulations. Imported coffee has contributed to a decline in producer-received prices.

## **Processing activities at local level**

Coffee processing procedures vary according to climatic factors. On the Gulf of Mexico slope, where undependable sunlight does not permit open-air drying, the farmer sends his product, still in the form of the coffee cherry – the seed still embedded within the pulpy fruit – to the processing plants. On the Pacific slope and the state of Chiapas, depulping, or "wet processing", normally occurs at the household level, with the seeds dried by spreading them over open-air patios or on the flat roof tops.<sup>17</sup> This "parchment coffee" – so-called because of the velum-like covering still on the seed – is sent to drying plants.

"Wet processing" has the following steps:

- depulping: usually sending the cherry through a hand-operating mill;
- fermenting: whereby the seeds are left to ferment in wood or cement tanks;
- washing: when the seeds are rinsed in collateral tanks or in rivers nearby;
- drying: when the seeds are left to dry on concrete or on fiber or synthetic mats spread on the ground.

We may speak of four types of wet-processing units:

- family household installations: with a capacity up to six quintals a day, this type only accounts for 2.5% of the total coffee processed in Mexico;
- rural installations: with a capacity of up to 90 quintals per day, this type represents 19.7% of the national total;
- semi-industrial installations: with a capacity of up to 360 quintals per day, it represents 13.8 of the national total;
- industrial installations: with a capacity above 360 quintals per day, this type represents 63.9% of the total wet-processing capacity of the country (found principally in Veracruz and Chiapas).

(SAGAR 1999: 12)

The dry processing – in which the vellum-like cover is removed – may occur (a) in plants close to the production units, particularly when they are owned by small-scale producer cooperatives, or (b) in plants close to the ports or large cities, particularly when they are owned by the large transnational companies. The product of this processing is green coffee, known as "café oro", or "café verde". The most desirable dry processing plants

<sup>&</sup>lt;sup>17</sup> It is also possible to simply leave the coffee cherry to decompose and expose the bean, in a very low-technology fashion employed to produce not more than 10% of the coffee harvested in Mexico. That is, 90% is wet-processed, as described.

have electronic selectors able to separate out the high-quality beans (in size). Such selection is also done by rows of women (virtually always) along a conveyor belt. It is only with this quality control that producers can differentiate their product toward making a greater profit.

The toasting and grinding of coffee should be done close to the time of purchase and consumption of the product. Thus there are toasters throughout Mexico and, of course, in the consumer countries.

Mexico also has three processing plants to make soluble, or instant, coffee, none in hands of the small-producer organisations.

## Types of coffee produced and production methods

In general, we speak of arabica and robusta coffees. Further, within the arabica coffee, there is the distinction between washed and un-washed. Further still, within the washed arabica one finds: "mild Colombians" (produced in Colombia, Kenya and Tanzania), and "other milds" (produced in Central America, New Guinea, Ruanda and Burundi – and of which Mexico is a prime producer). "Mild Colombians" receive higher prices than "other milds" on the international market.

Only 3% of Mexican coffee is "robusta" (the *C. canephora* species). Of the arabica varieties, Mexican producers specialize in the following:

- a) Typica (33%)
- b) Caturra (26%)
- c) Bourbon (17%)
- d) Mundo Novo (10%)
- e) Garnica (6%)
- f) Catuaí (3%)
- g) Catimor (2%).

86% of Mexican coffee is "washed" (arabica; depulped and washed). Some 11% is "natural" (arabica; sun-dried and sent through dry processing).

Typica was the variety originally introduced into Mexico, some 200 years ago (and is still considered to produce the highest quality of coffee). Beginning in 1950, the National Coffee Commission (and later the Mexican Coffee Institute) experimented with the other varieties mentioned above. The lower-growing trees (Bourbon and Mundo Novo) were of initial interest; by 1960 the lower-growing Caturra became of special interest. Then, beginning in 1980, the medium-growing varieties (Catuaí and Garnica) were privileged. (Escamilla 1993; Santoyo et al. 1994)

The largest coffee plantations tend to be intensively planted in the lower-growing varieties, capable of withstanding direct sun, and with high productivity. In Chiapas and Puebla, peasant coffee producers have also advanced significantly in the substitution of Typica for Bourbon and Mundo Novo. Nevertheless, small-scale producers today are showing keen

interest in returning to the Typica variety, for two reasons: (1) It is a highly acclimated plant, suited to organic production, more resistant to competition from other plants, more resistant to drought, with a greater capacity to absorb the nutrients of the soil, and (2) the beans are larger and longer, with an open division and a bluish color – all characteristics valued in the marketplace. (Pérez-Grovas 1998; Sosa y González 1995)

#### **Qualities of tree stock**

Some 40% of Mexican coffee is more than 15 years old. (Instituto Maya, *Gran Visión*, 1999) This is quite logical, considering that INMECAFE engaged in an intensive campaign to introduce coffee to, or renovate the plantations of, small-scale farmers between 1973 and 1988. There was a second important governmental initiative to renovate coffee trees – as part of *Alianza para el Campo* – between 1998 and 2000. Committed to the goal of increasing national production by 7,000,000 sacks a year, the government promoted the intensification of production on the same amount of land, using lower-growing varieties.

Approximately 37% of the nation's coffee plots are found below an altitude of 600 meters above sea-level.

Some 34% of the area planted in coffee suffers from the "*royo*" plague, and another 18% that of "*broca*". Of course these figures have risen in consequence of the reduced investment made by producers. Three-quarters of coffee producers do not invest in pest control (chemical or natural), 71% do not fertilise, and 40% limit their investment to a quick weeding at the beginning of the rains. (Instituto Maya, *Gran Visión*, 1999; 54)

## Number and characteristics of small-holders

As of 1992, when INMECAFE took for the last time a census, there were a total of 282,629 coffee producers in Mexico, 92% of whom were peasant, or small-scale producers, of less than five hectares. Some 69% of the total held less than two hectares (and on average 1.3 hectares). In absolute figures, there are some 270 large coffee plantations (above 50 hectares)<sup>18</sup> and some 138,000 peasant producers with, on average, 1.5 hectares. There is a large difference in productivity – some 6 quintales/hectare for peasant producers contrasted to 30 quintales/hectare for the large producers.<sup>19</sup> (Instituto Maya, Gran Visión, 1999, 43)

Over half of the 52 Indian ethnic groups in Mexico are involved in coffee production.

Those producers with less than two hectares of coffee generally do not need to look beyond the family for their labour needs. Maintenance of the coffee plot is usually – but not always – in the hands of the men. Women often take charge of the drying process at the household level, and sometimes participate in the picking. These producer families usually have a

<sup>&</sup>lt;sup>18</sup> These large-holders are principally found in the Soconusco (Pacific Coastal) area of Chiapas and in Xicotepec de Juárez, Puebla.

<sup>&</sup>lt;sup>19</sup> Note that small-scale organic production averages around 10 quintales/hectare in general, and is as high as 17 qq/ha among producers in Majomut, Chiapas.

subsistence economy; they depend on a diversified agricultural strategy, including the traditional cornfield (*milpa*), often banana or other fruit trees serving as shade-cover for the coffee plants. When coffee is the principal source of income, the coffee-cultivation culture is deep. Care includes: weeding, fertilizing, pruning, controlling the shade, and plagues, and renewing tree stock. Yields can sore.

When holdings rise to 2-5 hectares, it is common for the producer to hire day-labour, particularly during some part of the harvest months (November to February). When holdings are above five hectares regular contract-labour is common. However, one finds a range of investment strategies, from those committing the resources to maximise results, to those limiting their efforts to an occasional weeding, satisfied with the modest, low-cost income yielded, and employing their time in other pursuits.

It is also important to note the ineluctable slide toward ever-smaller holdings due to population increase. Mitigating factors here include: emigration from traditional Indian peasant communities, and the search for alternative income-generating activities. Indeed, it may be said that the normal boom-bust price cycle of coffee (and perhaps other agricultural products) appears to be undergoing a transformation, with shorter, lower booms and longer, deeper busts, in terms of the prices received by the growers, with the result that peasants long committed to coffee production are increasingly abandoning the strategy as inadequate to their minimum needs. Luís Hernández, one of the major analysts of the peasant coffee sector, reports that Veracruz has exported 800,000 people from coffee-growing areas between 1999 and 2001.<sup>20</sup> Needless to say, it is frequently the man of the family who emigrates, with the consequent deterioration of the family and community fabric.

What's more, many analysts – including anthropologist George Collier in his simplyargued and persuasive *Basta! Land and the Zapatista Rebellion in Chiapas* – charge that the coffee crisis, and the agricultural crisis in general, have been a major cause of the peasant Indian rebellion and resistance movement. Collier mentions the social disruption due to the secular decline of agriculture since 1965 and the crowning blow of plummeting prices after 1989.<sup>21</sup>

As a result of this emigration pattern, women and children are increasingly recruited within the family to tend the coffee plots.

One may speak of six production models present in Mexico:

1. Rustic: a low-maintenance, and low-yield, system, where coffee is maintained beneath the natural forest (particularly in Guerrero)

<sup>&</sup>lt;sup>20</sup> Personal communication cited by Simon Ticehurst (23 August 2001)

<sup>&</sup>lt;sup>21</sup> "During this oil-led boom, Mexican agriculture declined as the country experienced symptoms of what development economists refer to as the oil syndrome, or Dutch disease. This concept refers to how export booms undermine other sectors of a coutnry's economy, a phenomenon that economists nicknamed Dutch disease in their analyses of the negative impact of the North Sea gas development on Dutch manufacturing.... Economists explained that the export boom tended to overvalue the exporting country's currency and caused labor and other resources to shift into oil production or sectors producing non-tradeables such construction and infrastructure. In Mexico's case, while industry expanded from 26 percent of the gross domestic product (GDP) in 196t5 to 34 percent in 1982, the contribution of agricuture to GDP fell by half, from 14 percent o just 7 percent. (Collier; 1994; 91)

- 2. Traditional policulture: coffee associated with productive shade-producing trees (extensive among Indian producers)
- 3. Commercial policulture: coffee associated with other commercial crops: macademia trees, citric trees, avocado trees, etc. (originally in Veracruz)
- 4. Specialised production: coffee is the unique product of interest, is planted intensively (1,200/ha), with shade trees like Chalahuite, Pioche, Primavera, etc.
- 5. Sun-grown coffee: super-intensive (5,000/ha) specialised coffee plants requiring high doses of agro-chemicals (Soconusco and Puebla, and only 1% of total)
- 6. Organic: intensive (up to 2,500/ha), with diversified shade, employing compost and organic pest control, terracing, etc. (Oaxaca, Chiapas, and Guerrero).

Care in picking – and investment decisions in how much to spend on labour – are important to the quality of the final product. It is customary practice among low-income producers to limit the moments of picking to two during the harvest season. This is problematic as it induces a mix of mature and greener cherries and an uneven product being offered for sale.

## Women producers

Women are assuming a growing role in rural, and including agricultural, productive activities in Mexico. This is a direct consequence of the burgeoning out-migration, particularly of men, looking for work in the cities and, even more, in the United States. According to national census information, women make up some 11% of the heads of family in the rural sector, in general and 10% of agricultural workers (probably understood as their primary work activity). (*Instituto Naiconal de Estadística, Geografia e Informática*, INEGI, 1996, 1045-52)

As a rule, women do not inherit property in rural Mexico; women formal landholders are therefore usually widows or only-daughters.

In Chiapas the process of out-migration is less advanced – in absolute numbers, though possibly not in the proportion of families today in which men leave the homestead. As an example, women coffee-producers number only 50 of the 1,400 total in the Majomut cooperative organisation.

## Type of labour used

As already mentioned, in landholdings of less than two hectares, the family provides the labour force, working in particular during the harvest period (October to March). Women frequently participate in the depulping, washing and drying of the coffee beans, which are usually activities carried out at or near the house.

The large coffee plantations employ seasonal labour. In the Soconusco area of Chiapas (the Pacific coast), these plantations traditionally employed thousands (cumulatively) of Highland Indian peasants at the time of harvest. Since the 1980s – and the period of severe

civil war in Guatemala – Guatemalan peasants have largely taken over as the low-paid workforce of the Chiapanec plantations.

In a good year – for the market crisis has led to lower investment and lower productivity in recent years – a day-labourer can cut 40-60 kilos per day and earn the equivalent of US6-10 a day.

As mentioned above, some 3,000,000 persons work for some part of the year in the coffee sector. Around 80% of the seasonal labour force is Indian. (Martínez Veloz, 2001)

## Size of farms, and share of total production of small-holders

Data on the coffee sector was of high quality until 1989. In the early 1990s, almost half of Mexican coffee production came from holdings of less than five hectares (see chart below) and there are reasons to suppose that that portion has increased in the last decade. First, there is a natural tendency toward the fracturing of holdings as male heirs assume control of family lands. In the state of Chiapas (the principal producer of coffee), there was a spurt of land reform, affecting holdings of 50 hectares and larger, as in an attempt by the state government to respond to demands generated by the Zapatista rebellion (1994). Finally, the collapse of coffee prices in the last decade and a half has resulted in declining investment in plantation upkeep in general, and probably in a proportionally greater scale for middle (20 hectare) and large-scale producers.

	Tota	l area	Production		
Size of plantation	Hectares	%	Thousands of	%	
			quintals		
Up to 2 hectares	203,192	71.3	1,511	25.3	
2 to 5 ha.s	157,967	20.6	1,177	19.7	
5 to 10 ha.s	90,724	16.2	1,272	21.3	
10 to 20 ha.s	48,203	8.6	675	11.3	
20 to 50 ha.s	20,161	3.6	532	8.9	
More than 50 ha.s	39,744	7.1	806	13.5	
Total	560,343	100	5,973	100	

## Mexican coffee production according to size of holdings, 1990-91

Santoyo, et al. 1994, based on information from INMECAFE, 1991 and the Mexican Coffee Council, 1994

## Impact of coffee production on the environment

Coffee – particularly shade-grown coffee – has been much-heralded as an environmentally benign agricultural system; and so it is. As it permits an unperturbed semi-forested area, coffee supports greater biodiversity than virtually any alternative agricultural system. Biologists have determined that coffee grown under shade is conducive to maintaining biodiversity and ornithologists in particular have identified coffee as a "bird-friendly" agricultural production system. (Idesmac, 1998)

For the same reasons, coffee permits natural "environmental services" at the watershed level, regulating precipitation and retention of rain waters and mitigating the effects of hurricanes, flooding, drought and other natural disasters.

As a perennial crop, coffee causes much less erosion, and promotes better absorption of water into the subsoil, than *milpa* (corn and associated crops) agriculture – the most likely alternative among peasant farmers. While a one hectare coffee field loses on average only about 800 kilo of topsoil a year, a cornfield of the same size may loose as much as 20 tonnes. The greater the slope, the worse is the erosion. Inclined areas planted in coffee, on the other hand, can result in the formation of topsoil at an average rate of nine tonnes per year. (Pérez-Grovas 1998; Rice, et al. 1996)

#### Major private players

What was once a competitive world of Mexican national exporters (numbering 1,100 in 1989) moved toward oligopoly with the end of the international accord (national exporters number 103 in 1992).

As a consequence of the collapse of that system, and the quality control thereby implied, the major coffee conglomerates – Phillip Morris, Nestlé, Sara Lee, et al. – moved buying and processing operations increasingly to the producer countries.<sup>22</sup> In that manner, they assumed responsibility for obtaining the precise mix of characteristic and quality they required, and reduced the quantities needed to be warehoused in favour of just-in-time purchases. The great reduction in number, and agglomeration, of the transnationals, combined with their new presence in-country, made price-fixing easier.

Nestlé is the largest private buyer and toaster of Mexican coffee. Nestlé, worldwide, processes approximately 10% of the coffee sold (9,500,000 sacks per year) and, in Mexico, it sells 84% of the instant coffee consumed. (Van der Valk 1991; Santoyo, et al. 1994). The other important transnationals operating in México are: Far-Man, J. Aron, Omnicafé, Becafisa, TIASA, and Rotphos. Together, they account for 67% of the coffee exported from Mexico.

#### Major other players

The federal and state governments, and the Consejo Mexicano del Café, are major actors, which, along with the second- and third-tier coffee organisations, are key to defining public policy in the coffee sector. (See section 1.4. on public policy, below.) The Consejo (or Mexican Coffee Council) brings together the following major players in the field for discussion on coffee policy:

<sup>&</sup>lt;sup>22</sup> Names of some of the local affiliates of the internationals are: Becafisa S.A., Atlantic Coffee, Newman Gruppe, Onnicafé, and Volcafé.

- Representatives of federal agencies (secretariats of agriculture, commerce, social development and treasury)
- Representatives of states governments (Chiapas, Oaxaca, Veracruz, Puebla and a fifth rotating member)
- Representatives of producer organisations (Confederación Nacional Campesina, Coordinadora Nacional de Organizaciones Cafeltaleras, Central Independiente de Obreros Agrícolas y Campesinos, Confederación Nacional de Propietarios Rurales and Confederación Mexicana de Productores de Café)
- Representatives of exporters (Asociación Mexicana de Exportadores de Café)

The federal government agencies retain effective hegemony over the Consejo.

The small-scale coffee producer organisations mirror political distinctions in the country generally. The largest conglomeration continues to be that belonging to the corporativist-clientalist structures of the long-ruling Institutional Revolutionary Party (ousted in elections in 2000), though the second largest third-tier federation is made up of expressly non-PRI "independent" organisations.

In the late 1980s-early 1990s, several of these organisations (CEPCO, UCIRI, ISMAM, COOPCAFE, among others) achieved impressive consolidation, offering an array of services – from technical assistance, processing and marketing, to associated credit unions and other financial services, and even including health and other social services. Needless to say, the organisations also serve as important political interlocutors and, depending on inclination, channels of political patronage.

ORGANISATION	Number of members	Percentage of total
Unión Nacional de Productores de Café (CNC) <sup>23</sup>	87,915	46.4
Coord. Nal. De Organizaciones Cafetaleras CNOC <sup>24</sup>	60,398	31.9
Central Ind. De Obreros Agrícolas y Campesinos	13,960	7.4
Central Campesina Cardenista	6,658	3.5
Confederación Mexicana de Productores de Café	5,679	3.0
Unión General Obrero Campesino y Popular	4,542	2.4
Unión General Obrero Campesino Mexicana	3,607	1.9
Confederación Mexicana de Propietarios Rurales	2,688	1.4
Confederación Agrarista Mexicana	1,333	0.7
CODUC	1,123	0.6
Movimiento Nacional de los 400 Pueblos	914	0.5
Central Campesina Independiente	706	0.4
Total	189,523	100

Membership in the principal cojjee-producer organisations, 199	Membe	ership in	n the prin	cipal coffee	e-producer o	organisations,	<b>199</b> 5
----------------------------------------------------------------	-------	-----------	------------	--------------	--------------	----------------	--------------

Santoyo, et al, 1994

<sup>&</sup>lt;sup>23</sup> It should be noted that the inflated number of members of the CNC is due to its historic relationship with the PRI and its clientalist strategies of controlling politic participation. Indeed, up until 1989, many of the coffee producers receiving services from INMECAFE were enrolled automatically in the CNC:

<sup>&</sup>lt;sup>24</sup> CNOC is recognised as a strong player independent of government. This national organisation is made up of regional-level organisations.

In addition, there are important regional independent small-scale coffee producers' organisations, such as:

- Coordinadora Estatal de Productores de Café de Oaxaca (CEPCO)<sup>25</sup>
- Unión de Comunidades Indígenas de la Región del Istmo or UCIRI (Oaxaca)<sup>26</sup>
- Coordiandora de Pequeños Productores de Café de Chiapas
- Unión Regional de Productores de Café de Huatusco (Oaxaca)
- ARIC Veracruz
- Indígenas de la Sierra Madre de Motozintla, or ISMAM (Chiapas)
- Unión de Ejidos Majomut (Chiapas)<sup>27</sup>
- Unión de Ejidos San Fernando (Chiapas)<sup>28</sup>
- Unión de Ejidos de la Selva (Chiapas)
- Soc. Coop. Tosepan Titetaniske (Guerrero)
- Federación de Indígenas Ecológicos de Chiapas.

These organisations seek short-term credit between the time of purchases during harvest and receipt of payments upon sale of the processed coffee. Several have banned together in the Fideicomiso del Café (FIDECAFE, or Trust Fund for Coffee), having obtained resources from the parastatal Fideicomiso para la Regulación del Café (FIFREC).

Of course a great many of Mexico's coffee producers are not affiliated to any organisation.<sup>29</sup>

# **1.2 Price and profitability information**

## **International price for Mexico's exports**

There was a quantum shift in the pricing of coffee between 1975 and 1976, upon institution of the International Coffee Organisation quota system, raising prices by as much as 100-200%. Following are prices received on the New York market between 19976 and 2001.

## Price of Mexican (Santos 4) coffee in New York market

Error! Bookmark	US cents/lb	Year	US cents/lb
not defined.Year			

<sup>&</sup>lt;sup>25</sup> CEPCO has some 23,000 coffee-producer members and sells on average 60,000 quintals of coffee per year.
<sup>26</sup> UCIRI is a pioneer in organic coffee and the development of fair-trade markets. The same may be said for ISMAM, of Chiapas, mentioned below.

<sup>&</sup>lt;sup>27</sup> Majomut has developed innovative research and dissemination methodologies for ecological farming among the Indian peasantry.

<sup>&</sup>lt;sup>28</sup> San Fernando is noteworthy for its innovation in new areas. The cooperative has sponsored a clothes manufacturing *maquiladora* for its women and men members, an ecological farm for learning, an organic fertilizer plant, and basic-needs retail stores in its area of influence.

<sup>&</sup>lt;sup>29</sup> If we take the example of the Chiapas Highlands, with more than 5,000 coffee producers, the main independent organisation, Majomut, represents something over one-fifth of the total. (Instituto Maya, *Chiapas*; 89)

1976	234.67	1	991	84.97
1977	162.82	1	992	64.22
1978	173.53	1	993	69.91
1979	154.20	1	994	148.53
1980	N/A	1	995	149.30
1981	127.92	1	996	119.89
1982	139.87	1	997	185.02
1983	131.69	1	998	132.25
1984	144.24	1	999	101.54
1985	145.56	2	000	85.09
1986	192.74	20	$001^{30}$	65.89
1987	112.32			
1988	135.10			
1989	106.96			
1990	89.15			

ICO, composite indicator prices

Mexican coffee is "punished" on the international market for past – one hopes not continuing – mistakes, commonly receiving a 5-10 point discount. Mexico's image problem includes a reputation for exporting coffee of erratic quality; tasters are asked to dip into the product as much as eight times in a container, rather than the customary two. Indeed, the punishing differential grew – to as much as 25 points – in 1998-99. It is clear that this reflects a markedly growing power to fix prices on the part of the oligopoly of transnational buyers. (Instituto Maya 1999; 58, 118)

The differential that Mexican coffee prompts on the New York market varies, as indicated below. The negative differential is further compared to the premium received by the Colombian Excelso coffee:

<sup>&</sup>lt;sup>30</sup> Average (January – May 2001); in July 2001, the price dropped to under 55 cents/lb.



CNOC, Buletin of Twin Trading, 1993-2001

#### **Producer prices**

The following table shows the prices that Mexican producers have received, on average, between 1994 and 2000, quoted in cents-of-US dollars per pound of coffee.

1994	1995	1996	1997	1998	1999	2000
149.2	123.59	135.46	133.63	100.11	91.97	46.58

## Retail prices of coffee produced for domestic market

Specialty, organic coffee sells for approximately US\$10 per kilo, in Mexico. Instant coffee, at the other extreme, retails for less than US\$7 per kilo.

Types (organic, roasted, Arabicas)	peso/kg
Platchuela	80
Perla de la Selva	104
Los Altos	110
Unión de la Selva	118
Sierra Madre	102
Las Cañadas	148
Mezcla de la Selva	128
Lacandona Express	124
average:	114.25
Ecoselva (decaffeinated)	182
Nescafé Clásico (instant)	162

#### Retail prices in San Cristóbal, Chiapas

## **Yields**

A study in the 1980s by INMECAFE during six production cycles, holding constant the density (1,666 plants /hectare) and uniformly about 1,200 meters above sea level, offers information regarding yields, according to the variety of the coffee plant, as shown in the chart below.

#### **Production yields (coffee cherries)**

Variety	Production per coffee tree (kg)	Production (Qq/ha/yr)	Comparison with Typica
Typica	4.8	32.6	100.0
Bourbón	5.1	34.7	106.3
Caturra	4.9	33.3	102.1
Mundo Novo	5.4	36.7	112.5
Garnica	6.5	44.2	135.4
Catimor	5.2	35.5	108.8

Santoyo, et al, 1994

The following chart compares yields before and after the collapse of the international coffee accords.

Region	Before	After
Xicotepec, Puebla (1)	45	25
Cuetzalan, Puebla (2)	27	10
Zona central de Veracruz (3)	28	16
Soconusco, Chiapas (4)	30	18
Oaxaca, Zona del Istmo de Tehuantepec (5)	16	8
Oaxaca, Valle Nacional y Jalapa de Díaz (6)	33	23

# Average yields of coffee, by quintals (of coffee cherries) per hectare, before and after crisis period of 1988-1993

(Sontoyo, et al., 1994)

Notes:

- 1. Region of large plantations, sun-grown and high-density planting.
- 2. Region of peasant Indian producers, with a semi-intensive production scheme.
- 3. Region of medium-sized producers (5-10 has).
- 4. Region of large- and medium-sized producers.
- 5. Region of small-scale producers employing traditional shade-grown production methods.
- 6. Region of larger-sized producers (10-20 has) in intensive production.

Naturally, yields decline – by approximately half – when, for lack of profitability, cared-for plantations pass into "rustic" or "natural" coffee-producing plots (largely untended and without applied inputs). This phenomenon is widespread. It should be noted that, the crisis provoked large producers to invest more in high-input/high-yield production schemes, while many small-scale producers invested in organic production, with consequently improved yields, too. (Perez-Grovas 1998, Nigh 1992, Comision de Cooperacion Ambiental 2000)

Latin America in general experienced a major trend from shade-grown to sun-grown coffee during the 1980s-2000. The Smithsonian Migratory Bird Center reports the conversion of over 1.1 million hectares to sun-grown coffee. (Rice and McLean, 1999, 21)

#### **Production costs**

As a rule of thumb world-wide, producers of coffee will tend to break even when the international price of coffee is at US\$100/lb. Costs of production, and particularly labour costs, vary considerably by region, in Mexico. We compare, below, the costs of a medium-to large-sized producer with a peasant producer of coffee. In the first chart, costs over the first five years of a coffee plantation are shown for producers, with more than five hectares in intensive production. In the second chart, costs are estimated for a peasant producer (less than five hectares) of organic coffee. The organic producers have lower costs – and as an additional benefit, the wages of labour tend to remain within the family.

(In both charts, yields are of approximately 20 quintals per hectare. In the intensive production model there are some 2,500 plants per hectare; in the organic model there are

some 1,600 plants per hectare. A day's labour is estimated at US\$3.00 per day. All prices are quoted in US dollars.)

CONCEPT	Year 1	Year 2	Year 3	Year 4	Year 5 <sup>31</sup>
Labour					
Initial weeding	60	0	0	0	0
Clearing	80	0	0	0	0
Control of root system	240	48	24	24	24
Planting/replanting	80	12	6	6	6
Clearing (with machete)	45	60	60	60	60
Applying herbicides	18	18	18	18	18
Fertilising	12	24	24	24	24
Pruning and removing sucres	0	30	24	24	24
from plants					
Control of shade	24	12	12	12	12
Harvest	0	0	60	300	500
Subtotal	559	204	228	468	668
Materials					
Plants	700	50	25	25	25
Fertiliser	40	100	100	100	100
Herbicides	20	20	20	20	20
Subtotal	760	170	145	145	145
Other costs					
Transport of materials	40	100	100	100	100
Transport of plants	80	10	10	10	10
Transport of coffee	0	0	10	40	60
Miscellaneous (5%)	72	20	20	30	40
Subtotal	192	130	140	180	210
Grand Total	1,512	504	513	793	1,023

#### Production costs for middle- and large-scale producers in Vercruz

Santoyo et al. 1994, 55/updated in 2001

# Production costs for small-scale organic producers in Chiapas<sup>32</sup>

CONCEPT	Days of work	Total in US\$
Control of shade	6	18
Pruning	6	18
Control of roots	3	9
Elimination of unproductive plants	5	15
Fertiliser preparation	6	18

 <sup>&</sup>lt;sup>31</sup> This refers to Year 5, and subsequent years.
 <sup>32</sup> Organic-farming inputs include lime, copper sulphate, plastic bags, plants, etc.

Soil conservation activities	6	18
Opening rotos	2	6
Re-planting	2	6
Clearing	16	48
Application of compost	12	36
Pest control	3	9
Harvest	80	240
"Wet" processing of cherries	15	45
Transport	0	5
Inputs (a)	0	10
Total	162	501

Ismam 1990/ and updated by authors in 2001

#### **Profitability indicators for alternative crops**

Coffee, in the peasant production system (including production for consumption and for sale), is usually one of several activities. Rarely will the peasant producers leave the sector completely, and indeed there is evidence that following the onset of the coffee crisis, Chiapas peasants actually increased the area of their coffee plots and the level of their investment (over that for cattle-raising, which also experienced depressed prices). (Martinez Quezada 1995) However the more frequent strategy of the small-scale producers is to seek to combine coffee with other income-generating crops, a variety of which are indicated below, with their respective profitability indicators.

Annual earnings for a multi-crop system in Veracr
---------------------------------------------------

Production system	Earnings (Mexican pesos)		
	No family <sup>33</sup>	With family <sup>34</sup>	
Specialised coffee	277.2	892.2	
Coffee/fronds (for	2,577.4	4,002.4	
adornment)			
Coffee/Guanabana	1,853.0	2,573.0	
Coffee/lemon	3,363.0	4,113.0	
Coffee/Macademia	16,675.0	17,695.0	
Coffee/banana/orange	4,352.5	5,477.5	
Coffee/banana	2,624.0	3,494.0	
Coffee/tepejilote	917.4	1,757.4	
Coffee/avacado	4,913.5	5,768.5	

Rodríguez, 1994, 125

#### Poverty indicators in major producing regions

<sup>&</sup>lt;sup>33</sup> Wages of family members are not considered in the calculation.

<sup>&</sup>lt;sup>34</sup> Wages, including of family members, are included in the calculation.

The major producing areas are mountainous, with poor communications infrastructure, and some 84% of the communities in which coffee is a primary agricultural activity have high, or very high, poverty indicators, based on health, housing and education.

State	Very high	High	Moderate	Low	Very low	TOTAL
Colima				3	2	5
Chiapas	29	40	5	2		76
Guerrero	5	2	3	2		12
Hidalgo	12	11				23
Jalisco		3	1	5		9
Nayarit		1		7	1	9
Oaxaca	58	59	3	1		121
Puebla	24	23	1			48
Querétaro		1				1
San Luis Potosí	2	7				9
Tabasco			1	1		2
Veracruz	20	36	14	9	1	80
TOTAL	150	183	28	30	4	395
%	38.0	46.3	7.1	7.6	1.0	100.0

Levels of poverty in coffee-growing municipalities in México

Hernández N., Luis y Teresa Ejea. 1996



# **1.3 Value Chain**

The proportion of the consumers' over-the-counter sales price going to the producer varies according to various conditions, including:

- *h)* The current international market price (in New York, or Hamburg/Bremen)
- *i)* The differential applied to Mexican coffee on international markets The negative differential of Mexican coffee on the New York Coffee Exchange fluctuates over time and by buyer, but is frequently at 5-10 points, and has gone as high as 30 points.
- *j)* Currency markets (particularly of US dollars and Mexican pesos in this case) The variation in the exchange rate has a significant impact on the price going to producers. In 2001, the Mexican peso is probably overvalued, by as much as 30%, which reflects in a decline in purchasing power by the producers in a similar proportion.
- *k)* Participation in a cooperative organisation
   Member-producers in the more consolidated cooperative organisations may sell their product for prices up to 20% higher than those unorganised small-scale producers selling to intermediaries. If the cooperative exports directly and still better if to fair trade and/or organic markets members may receive further premiums of up to 15%.
- Geographic location
   Producer received prices tend to vary according to accessibility too. Buyers usually pay less to producers living in more distant communities.

Expenses	Amount	%
Producer	1.20	16.0
Wet-processing	0.21	2.8
Dry-processing and export	0.41	5.5
Shipping and customs	0.37	4.9
Roasting and packaging	1.35	18.0
Public relations and promotion	1.35	18.0
Marketing	1.29	17.2
Retailer and taxes	1.32	17.6
Total	7.50	100.0

The following table shows the value chain with reference to the retail price (in US dollars) of one kilo of roasted, ground and packaged Mexican coffee sold in Europe.

(Santoyo, 1994; with figures from Sallé, 1992)

It should be noted that, when the roasting and latter steps in the production-marketing chain occur in the consumer country, more than 70% of the final price also remains within the consumer country.<sup>35</sup>

Transport 1 frank Subtotal 12 franks

Publicity and promotion 6 franks

Investigation/marketing 6 franks

<sup>&</sup>lt;sup>35</sup> For the sake of comparison, we present two additional calculations. The value chain calculated for African coffee sold in France in 1993 follows (Daviron and Fousse, cited in Renard 1999: 158):

Raw material7 franksProcessing2 franks

Packaging 2 franks Troughout 1 franks

Costs for producing a quintal of (conventional export-quality) coffee, on the part of a small-producer cooperative, follow.

Costs	US \$ / Qq	%
Collection of the coffee	1.80	11.6
Dry-processing	0.84	5.4
Administration	4.83	31.2
Marketing	6.80	44.0
Financial	1.20	7.8
Total	\$15.47	100.0

(Majomut cooperative, Chiapas; 2000-2001 harvest)<sup>36</sup>

Other (financing, etc.)	3 franks
Profit	3 franks
Subtotal	18 franks
AVERAGE PRICE/Kilo	30 franks

Rice and McLean (1999, 22) carried out research in Central America and ofer the following paying prices and margins for washed Arabica coffee:

Small farmer	US\$0.20-0.40
Local buyer	0.60
Exporter	0.85
Importer	1.05
Roaster/wholesaler	4.00-6.00
Retailer	7.00-12.00
Consumer	12.00

<sup>36</sup> The following tables present a detailed description of all expenses by a Mexican producer cooperative (Union Majomut):

Collection of the Coffee		
Concept	Pesos/Qq	%
payment to the recipient	6.64	39.41
Transport	3.40	20.18
Insurance	2.65	15.73
Packaging	0.70	4.15
Electricity, Gas and Water	1.17	6.94
Labour	0.33	1.96
Maintenance of warehouse	0.94	5.58
Maintenance of vehicles	0.38	2.26
Repairs	0.64	3.80
Total	16.85	100.00

Dry-Processing		
Concept	Pesos/Qq	%
Electricity	2.53	31.98
Gratification	0.19	2.40
Labour	3.90	49.30
Maintenance of Roaster	0.01	0.13
Inputs	0.42	5.31
Miscellaneous	0.06	0.76
Packaging	0.80	10.11
Total	7.91	100.00

Administration	Pesos/Qq	%
Salaries and Wages	17.49	38.51
Electricity	0.06	0.13
Telephone	2.85	6.27
Accessories	1.49	3.28
Maintenance of vehicles	1.24	2.73
Paper and Office Equipment	0.60	1.32

Using the price of coffee on the New York market on 31 May 2001, of 59.1 cents/lb, the coffee producer would receive almost of 41 cents per pound of coffee sold, as shown in the following calculation (all prices in US cents):

Purchase price	59.10
Differential (10%)	(6.17)
Transformation and handling costs	$(12.21)^{37}$
Price of raw material going to producer	40.72

This means that a small producer within a Mexican cooperative receives approximately only US\$0.41 for one pound of (parchment) coffee. (In comparison, a peasant producer outside of a cooperative would receive approximately US\$0.23/lb. This is based on the fact that intermediary buyers usually retain some 30 points of the New York price to cover transport and other costs, as well as profit.)

#### **Major players**

The following actors are important in the value chain:

- Producers and producers' organisations
- Large scale producers and private owners of drying plants, etc.
- Local buyers
- Transnational corporations (toasters, distributors, retailers)

It is worth observing that, with reference to the chart in the section above, the middlemoments in the production-to-sales process tend to increasing consolidation, while those at the production and the retail extremes tend to be more diversified and decentralised. The brokerage houses, major players from the end of the 19<sup>th</sup> Century until the middle of the 20<sup>th</sup> Century, were displaced in part by INMECAFE. With the privatisation of INMECAFE after 1992, the part of the national production that had been marketed by the Institute –

miscellaneous	0.26	0.57
mailing	2.33	5.13
Other inputs	0.25	0.55
Insurance	1.50	3.30
Gas and Water	7.00	15.41
Maintenance of office Equipment	0.33	0.73
membership fees	1.39	3.06
Transportation	6.66	14.66
Consultants	1.08	2.38
Building maintenance	0.02	0.04
bank commissions	0.57	1.25
ISR	0.30	0.66
Total	45.42	100.00

<sup>37</sup> Cooperative cost = 15.47 /quintal (or 12.21/lb). One quintal equals 57.5 kilograms, or 126.65 lbs.

between 33 and 44% between 1970-1985 – largely fell into the hands of the large transnationals, since the national brokerage houses were unable to compete for the additional market. If the latter were undercapitalised, the transnationals were beneficiaries of international finance. For example, E.D. & F. Man was able to operate in Mexico thanks to a credit for US\$250 million obtained from a consortium of 23 banks in the 1990s. Transnationals, such as Volcafe and Atlantic Coffee/Omnicafe, have penetrated even into the regional and local Mexican markets, having a distinct competitive advantage, with annual interest rates of 8-11%, over the national brokers, with annual interest rates of 34% to 54%. (Célis et al. 1991; Renard 1999)

Transnational companies and their local affiliates are often active in buying coffee directly from producers (principally those not members of organisations). With the advantage of access to international financial markets and consolidated efficient operations, they are able to offer competitive prices, and even engage in "dumping", in order to eliminate the competition of cooperatives and producers' organisations in general.

Often small-scale producers commit themselves to sell to local intermediaries in exchange for up-front credit – at usurious rates. They also fall prey to fraudulent practices such as the rigging of scales or the application of penalties.

#### **Obstacles to increasing the farmers' share**

INMECAFE, early in its existence, decided to set up Specialized Units for Coffee Production (*Unidades Especializadas de Producción de Café*, UEPC) – which often functioned as competition to the independent small-scale producer organisations. When INMECAFE was disbanded, the smallholders grouped in UEPCs were without experience in looking for their own technical assistance, financing, collective marketing, and other of the strategies of increasing the participation in profits on the part of the smallholders. Even the cooperatives that had existed and now survive – some of which were able to acquire infrastructure from INMECAFE and others of which have their own<sup>38</sup> – continue to record problems in terms of the poor quality, or obsolescence, of their dry-processing plants, poor quality of roads (particularly in Chiapas, Oaxaca and Guerrero), lack of lines of credit that would have allowed the cooperatives to compete with the transnationals, lack of information on the workings of the international markets, lack of information of contemporary production methodologies.

#### Obstacles to export of processed products to consumer countries (tariff, non-tariff, other)

Several of the consolidated small-producer oganisations are preparing themselves to compete directly in international markets with final products, such as instant coffee or packaged roasted coffee. There are no tariff obstacles to export. Of course, consumers

<sup>&</sup>lt;sup>38</sup> By the time of its privatisation in 1989-90, INMECAFE had some 12% of the national operational infrastructure, including 12 dry-processing plants, and 31 warehouses. (Celis et al, 1991)

have varying tastes, particularly as to the type of roasting preferred, which creates a challenge for those coffee organisations which would like to export their finished product.

# <u>Selected examples of successful projects helping farmers capture a higher share of export and retail price</u>

Successful projects of small-producer coffee organisations include:

- CEPCO, Majomut, La Selva, ISMAM, UCIRI and other organisations participate in the system of Fair-Trade Labeling Organisations (FLOs), whereby farmers are guaranteed US\$1.26/lb, or \$0.05 above the market price if that price is superior to \$1.26.
- UCIRI, ISMAM, Majomut and other organisations are producing and selling organic coffee. That production system cuts costs, in the long run, and improved yields. In general one may expect a 15% premium in the organic coffee market.
- Producers in El Triunfo, Chiapas and others area producing and selling shade-grown coffee in parks and protected areas of the country. Starbucks has purchased this product at up to US\$40/100 pounds above market price.
- ISMAM y others are experimenting with the marketing of ground roasted coffee, in both domestic and international markets.
- UCIRI<sup>39</sup> is producing instant coffee for national and international markets, with sales, in 2001, of some two tonnes per month.
- CNOC, La Selva, Unión de Ejidos San Fernando, COOPCAF, CEPCO and others are entering specialty retail markets in México City and elsewhere in the country. Profits are minimal to date but the prospects are considered good.
- UCIRI, CEPCO, FIECH, Majomut, San Fernando, ISMAM, Luz de la Montaña, Tiemelonlá Nich Klum, Unión de Cooperatives de Chiapas, and others are marketing their own specialty brands of coffee at the local and regional levels.

As an example of the difference that fair trade markets can make, Unión Majomut in Chiapas records, in the disastrous 2000-2001 harvest year, that their members obtained US\$1.25/kilo of natural parchment coffee (and \$1.90/kilo of organic parchment), while those selling to local intermediaries received \$0.70/kilo of parchment coffee – an increase of 71-157%.

# **1.4. Public Policy**

## Impact of structural adjustment and liberalization of the coffee sector

<sup>&</sup>lt;sup>39</sup> A profile of the UCIRI (*Unión de Comunidades Indígenas de la Región del Istmo*) project is found in Laure Waridel's *Un café por la causa*. UCIRI has also developed a school, receiving some 25 peasant coffee growers interested in specialising in organic coffee for a course of one year's duration.

As part of the grand liberalization of the Mexican economy (a policy beginning in 1982 and continuing to the present day), INMECAFE (charged in its heyday with providing technical support, financing, investigation, and direct marketing) was phased out and the State has drastically reduced expenditures intended to support the coffee sector. The *Aseguradora Nacional Agrícola y* Ganadera – offering insurance against natural disasters – was closed and the *Banco Nacional de Crédito Rural* -- offering credit – was drastically cut back. (Pérez-Grovas 1998; Celis 1999) Subsidization also ended of fertilizers and pesticides in terms of the price charged to the producers, as well as the warehousing of the product as a government services.

Mexico (together with all of Central America except Nicaragua) followed the United States' position, ending the market controls of the ICO. They argued the injustice of the controls system, since "other milds" enjoyed a far greater demand that the Brazilian *arábica* and was cheaper than the "Colombian milds". Mexico in particular, as the fourth largest producer of coffee in the world, was assigned 4.1% of the market, thus restricting its exports to only 42% of its total production. Once the Accord was trashed, producer nations emptied their inventories onto the market. The price fell from US\$1.10/lb. in June 1989 to \$0.70 in October 1989; the price continued to plummet, bottoming out at \$0.48/lb. in September 1992. This process produced the following effects:

- In the international market coffee was selling for less than 80% of its production costs.
- The market was in the hands of the buyers.
- Many brokers and exporters were ruined. (Of the 1,100 exporters registered in 1985, only 103 were operating in 1995.)
- Public programmes offering credit, training, technical assistance, and research and development were cut.
- Small-scale producers were squeezed by low prices, reducing investment in their plots and therefore obtaining lower yields, with the result that Mexican peasant producers lost market share to large producers.
- Internationally, Mexico lost market share to Vietnam and other producer countries. Between 1989 and 1995 production declined by 6.6%.
- Social effects were many. Out-migration from peasant coffee-producing areas increased. School-aged children had to look for work. (Celis et al, 1991; Renard 1999)

# <u>Agrarian policies relevant to the sector (including: rural infrastructure policy and credit and input-subsidy schemes)</u>

In earlier sections of this paper, we have reflected on the importance of coffee as one of the axes of Mexican government agrarian policy since the Second World War, and how privatisation of the coffee sector has been the driving vision of policy-making in the sector since at least 1992.

With that vision firmly established, it is nevertheless also true that government programmes designed to aid the coffee sector have continued until the present. They have undergone partial decentralisation, to the state level. Programmes for small-producers have been

partially transferred from the agricultural secretariat to the compensatory structures of "social development". But if price guarantees, and processing and marketing parastatals, passed into history, some credit and technical assistance have persisted in government programming, as have some other protective features.

Following years of heavy investment in infrastructure, principally through INMECAFE, the government implemented a policy of divestment, usually in favour of small-producer organisations, from 1990 to 1994. Various cooperatives received warehouses and processing plants at reduced prices, payable over ten years. (Celis 2000) The 1992 reform of the agrarian law, in addition to opening the door to privatisation of the Mexican *ejido*, established that individuals may own no more than 300 hectares of land planted in perennial crops (such as coffee).<sup>40</sup>

In 1993-94, the newly designed Mexican social investment fund, Programa Nacional de Solidaridad (PRONASOL, or Solidardiad), working with the Instituto Nacional Indigenista (INI), offered an extensive – if shallow – non-collateral credit programme for small-scale coffee producers.<sup>41</sup> Depressed prices led to wide-scale default.

Responding to social unrest, in 1994 the INI implemented a subsidy programme to coffee producers (direct payments of M\$700/ha. to small-scale farmers). In lieu of INMECAFE, and respecting the decisions dictated by the neo-liberal model, the government had promoted the creation of a multi-sectoral policy advisory body. In this Mexican Coffee Council (Consejo Mexicano del Café) governmental programmes in particular are discussed and reviewed. The Council consists of representatives of: federal agencies (secretariats of agriculture, commerce, social development and the treasury), coffee-producing state agencies (permanent members from Chiapas, Oaxaca, Veracruz and Puebla, and one rotating additional state government), the principal producers' organisations (see chart in "other actors" section, above), and the private-sector Mexican Association of Exporters of Coffee (Asociación Mexicana de Exportadores de Café).

In addition there are state-level advisory councils, or *Consejos Estatales*, which also have non-governmental representation.

The Mexican Coffee Council is dominated, in practice, by the federal government representatives sitting on that body. Consequently, the independent coffee-grower organisations, and CNOC in particular, have opted for public pressure, and especially state-level and national demonstrations and the temporary take-over of office buildings. These pressures have been fundamental in maintaining a commitment to the sector on the part of the government, and in defining emphases of those programmes, particularly including lines of credit.

<sup>&</sup>lt;sup>40</sup> A revision of landholding is underway. In Chiapas, plantations of up to 1,000 hectares are still found. In most of these cases various family members hold title in a manner that formally complies with the law while allowing the large coffee plantations to persist. In sum, it is doubtful that small-holders will receive land through future land reform in Mexico.

<sup>&</sup>lt;sup>41</sup> The programme gave some M\$223,000,000 to 203,650 farmers with 345,271 hectares (average 1.7 ha/farmer), so that 45% of the coffee plots of the country were covered – when, previously, credit was only available in significant quantities to middle-sized farms (15 hectares). (Instituto Maya 1999; 81)

The agriculture secretariat's Programa de Alianza para el Campo (ProCampo) has offered, since 1994, funding for the construction and rehabilitation of warehouses and for small-scale investment – principally, the wet-processing infrastructure, such as cement patios, depulping machines, and washing and fermentation tanks. But ProCampo's central functions became normative and promotional in nature, while distribution of the greatest part of the financial resources oriented toward the coffee sector was devolved to the state governors and the state councils.<sup>42</sup> (The Empleo Temporal programme has complemented income transfers to small-scale coffee producers.)

The agricultural secretariat (SAGAR) and the Mexican Coffee Council did sign off on an ambitious programme to position Mexico competitively against Colombia and Brazil in the market, announcing a goal of increasing production from 4,500,000 sacks to 7-10,000,000 (including an additional 750,000 hectares of coffee plantation) between 1995 and 2000. The inspiration was the Costa Rican model: low-stature Caturra plants, 3,000-5,000 per hectare, with little or no sun, heavy fertiliser use, and 50 quintals/hectare yield. Saplings, technical assistance and subsidies were channelled through the state councils. The programme's results are unspectacular (achieving between 10-30% of expected increases in yields). Worse, the programme did not respond to the peasant Indian reality of most Mexican producers, living in mountainous zones, uncommitted to renovating their plots with a new variety, with an unconducive technology, and inadequate financial and other support. In any event, last-minute decisions to divert funds to marginal coffee-producing areas with large peasant populations voting in crucial 2000 elections, left the plan unfulfilled.

Thanks to lobbying and mass demonstrations organised by producer organisations, in 1995 a special programme provided credit in dollars for production; in 1998, the budget for the sector was increased; and in 1999 the government agreed to a special programme to support the sector during the 2000-2001 harvest year.

## Alternative marketing strategies

Mexican coffee producers participate in two alternative marketing strategies: (a) cooperatives taking over functions that lessen dependence on intermediaries and (b) obtaining premiums thanks to specific qualities of the coffee, or of the producers themselves (in "sustainable" and "fair trade" markets).

The principal of vertical integration is well established, with far greater value added accruing to the small-producer cooperatives the closer they come to retail sales. As described above, coffee cooperatives made a break-through in this respect in the 1980s and

<sup>&</sup>lt;sup>42</sup> Decentralisation has weakened the negotiating powers of the national-level coffee-grower organisations, probably politicising decision-making still more, in the best clientalist fashion. One notes regional differences. Oaxaca, for example, has permitted significant participation in policy-making by local organisations during the period of Governor Diodoro Carrazco and CEPCO Coordinator Isaac Rodríguez (1994-1999). (Instituto Maya 1999; 87) Under the governorship of Pablo Salazar Mendaguchea (2001-), Chiapas has experienced an opening for more participation in policy-making by social organisations.

1990s when various of them were able to (a) acquire sophisticated transformation plants (*beneficios secos*) and warehouses and (b) export directly, particularly into sustainable-coffee international markets.

The traditional producer-to-consumer "ladder" consists of the following "rungs":

- Consumer
- Retailer
- Toaster
- Distributor
- Exporter/importer
- Drying industry
- Regional intermediary
- Local ("coyote") intermediary
- Producer.

The consolidated coffee cooperatives can absorb the entire (five-rung) process from producer-to-exporter, or even (six-rung) producer-to-distributor. By capturing additional value-added, the cooperative has the potential to offer a better price to the producer (compared to that offered by the traditional *coyote*). But experience indicates that interesting premiums (as much as double the price paid for conventional coffee) only consistently accrue to the producer when the cooperative functions in an "alternative" market, which realises 5-20% additional sales revenues when niche-marketed to meet consumer demand for sustainable and/or fair-trade products.<sup>43</sup>

Both locally and internationally, many coffee cooperatives have invested in brand development, presenting their own labels, and usually projecting sustainability, though only sometimes relying on certification (of organic and fair-trade products). "Café La Selva", from Chiapas, is the best-known and most successful of these certification-based retailing initiatives – with over a dozen coffee shops operating with the La Selva name. A recent example of employment of a similar strategy in the international market is the agreement between the consolidated peasant organisation ISMAM (based in Tapachula, Chiapas) and the COR International company of the United States, whereby the latter will lend US\$9,000,000 to the former in a joint venture to develop a new "Maya Magic" coffee label to be marketed in the United States.<sup>44</sup> This is a regional effort (in nine US states) in the same vein, and competing with, earlier initiatives on the part of US-based retailers to sell Mexican coffee.

The impetus for various of these initiatives is natural resource conservation; and they suggest the possibilities for inter-sectorial, sometimes even odd, alliances among private and public sector. For example, the Smithsonian Migratory Bird Center (SMBC), in Washington, D.C., sponsored an international conference on shade coffee and biodiversity in 1996, attended by academic, governmental, private and social sector actors, and since

<sup>&</sup>lt;sup>43</sup> Figures vary widely. Seattle's Best Coffee claims to pay 30 to 150 percent more for shade coffee than sungrown coffee. (Wille, 1994, 84)

<sup>&</sup>lt;sup>44</sup> The US company is owned by a latino, Carlos Olamendi. Marketing will include a pitch to that target clientele. The effort was promoted by the Fox government and, reputedly, the Agency for International Development of the US government. (Cuarto Poder, 1 July 2001, p 24)
then has engaged in research and policy work to promote shade coffee as a means to further safeguarding biodiversity. Hardly alone in manifesting concern for North American migratory birds and the role of Mexican agro-forestry, the Smithsonian is one among the following governmental and inter- and non-governmental actors working on issues related to Mexican shade coffee: the US Department of the Interior (and its Breeding Bird Survey), US Fish and Wildlife Services, Inter-American Foundation (US-government funded), National Audubon Society, Conservation International, Specialty Coffee Association Of America, Commission for Environmental Cooperation (an agency of the North American Free Trade Agreement), and the Global Environmental Fund (associated with the World Bank). Moving beyond general investigation and promotional activities, Starbucks (worldwide retailer, roaster and brand of speciality coffee, worth \$2 billion) gave Conservation International in 1998 US\$150,000 to promote natural, shade coffee in El Triunfo reserve in Chiapas, and in 2000 gave another \$600,000, over three years, for the Conservation Coffee programme which operates in Central America and southern Mexico. Based on this programme and the association with CI (which we might call a "quasicertification"), Starbuck launched its "Shade Grown Mexico" brand of coffee, which is considered a success by CEO Orin Smith. (Sosnowchik, 2000)

In a manner representative of the overlap often found, Starbucks was also accepting approaches from the "fair-trade coffee movement", in 1999, according to the Wall Street Journal. TransFair USA certifies products originating with producer organisations and passing through intermediaries, all of whom are committed to maximising the producers' share in the value chain. This niche market – somewhat deprecatingly called "cause" labels – is less developed in the United States than in Europe, though it is growing in the former. The giant roasters are sceptical. A Maxwell House spokeswoman spoke of the supply of fair trade coffee as "tricky", due to limited supply and other uncertainties. A Nestlé spokeswoman insisted that "Price and quality are our two determinants. We have no relationship with coffee growers." Nevertheless, TransFair considers viable a goal of reaching 5% of the \$18 billion US coffee market by the year 2005. Most of this coffee would come from Central America and Mexico. (Carlton, *The Wall Street Journal*, 23 November 1999; and Wille, 1994)

### Coffee export taxes, licensing fees, etc.

Mexican coffee faced import restrictions in the European market until 1997. Until that time, there was a 4% tariff imposed by the EU, based on the fact that Mexico was part of the OECD. Central American "other milds", for example did not face this surcharge. Consequently, Mexican coffee has been directed primarily to the United States market.

# Import taxes on inputs

Since the signing of the North American Free Trade Agreement (NAFTA), agricultural inputs are free of tariffs. Nevertheless, inputs have gone up in price. Among the reasons for this are the additional charges for storage and distribution, since these are no longer services provided by the government.

### **Technical assistance**

Mexican large-scale producers have long sought their own technical assistance, focussed on conventional chemical-based technology principally for the newer species of low-growing and high-yield coffee trees. Small-scale producers relied on INMECAFE from 1983 to 1989 for a similar technological package of chemical inputs. Furthermore, INMECAFE assumed an important function – beyond technical assistance, properly – by selling almost half of small-scale producers' exports (Celis 2000).

With the demise of INMECAFE, technical assistance to small-scale coffee producers shrank greatly, except in the case of those belonging to cooperative organisations. The latter came to focus their assistance programmes on organic coffee production. (Pérez.Grovas, et al, 1997)

Governmental assistance in marketing directed to these coffee organisations was very little, and came about as a result of donations from international funders. Marketing expertise was gained from hard-earned experience. Losses were heavy from 1989 to 1994. As mentioned above, CNOC established its own marketing enterprise, "Promotora Comercial de Cafés Suaves Mexicanos". After five years, the Promotora closed; the member organisations had learned to market their product directly and there was no longer sufficient volume to warrant its existence. Nevertheless, marketing never stopped being a problem area, and in 1998 the governmental programme, Fondo Nacional de Empresas de Solidaridad (FONAES), freed funds for coffee cooperatives to seek and pay marketing consultants on an individual basis.

# **Diversification of production**

Since the crisis in the coffee sector first surfaced more than a decade ago, coffee farmers understood that diversification of their economies was desirable. However, the investment in such diversification is major, and, with reference to the small-scale coffee producer organisations diversification also brought with it a risk of weakening the organisation itself (as the role of the organisation would become more diffused). Over time, and with additional negative, long-term factors becoming manifest (including the entry of Vietnam into the market), the commitment to diversification has strengthened. This is also true of government policy-making bodies.

### Monitoring of quality of production and exports

Because of the absence of national quality-control mechanisms in production and export, Mexican coffee is subject to the pronouncements of the international professional tasters. The Universidad Autónoma Chapingo – the public agricultural school – is presently promoting a project to establish a Mexican export quality-certification entity, confident that this would reduce the penalty differential that Mexican coffee now suffers on the international market. This is the Certificadora Mexicana de Productos y Procesos Ecológicos (Mexican Certifier of Ecological products and Processes), CERTIMEX. To date, CERTIMEX has developed a manual to determine the quality of green coffee and criteria for the certification of cupping laboratories. CERTIMEX is already offering training courses and expects to begin formal certification processes for the 2001-2002 harvest.

## **Environmental policies**

Organic coffee received a boost from the Consejo Estatal del Café in Oaxaca en 1997, followed by a similar support programme in Chiapas in 2001. Sustainable and shade coffee found a greater market in the United States following an international conference in 1996.

However, the ProCampo programme to increase coffee production in the country in general does not take into account issues of over-production nor change of land-use.

It should be noted that there are environmental concerns regarding coffee processing. The wet-processing in Mexico consumes an enormous amount of water – as much as 15,000,000 cubic metres per harvest year (Instituto Maya 1999; 55) – and the waste does affect adversely water quality in the rivers to which this resource is usually returned.

Positive environmental effects include the limitation of erosion (considering annual agricultural practices as the likely alternative use of the land) and the carbon sequestered by the coffee trees. In fact, it is estimated that the coffee plantations in Mexico sequester the equivalent of five times the amount of carbon dioxide emitted in Mexico City.<sup>45</sup>

# **International assistance**

Although Mexico is not a prime recipient of private international assistance, the peasant coffee sector has figured in the strategies of various international funders active in the country, and particularly those with a sustainable development focus, as exemplified below.

- a) Chiapas' COOPCAFE has received support from Oxfam Holland (Novib) since 1995 to promote and train in organic coffee production. Some 7,000 producers have benefited from the funds, with average US\$40,000 a year.
- b) The MacArthur Foundation supported the training of organic agricultural producers in Chiapas, from 1996 to 1999.
- c) The Rockefeller Foundation made grants for research and dissemination of agroecological technologies, available from 1993 to 1998.
- d) The Ford Foundation supported exchanges between practicioners in organic agriculture in Chiapas in 1997-98.

<sup>&</sup>lt;sup>45</sup> This is claimed in a policy document of eight governors from coffee-producing states, alerting the nation to the ecological disaster pending if the coffee sector is abandoned. (*La Jornada*, 18 July 2001; 43)

- e) The Inter-American Foundation (with US government funds) implemented a multigrant programme of support to the peasant organic coffee movement during the first half of the 1990s, supporting CNOC, and member organisations, to improve training capacities, capitalise marketing initiatives, and other activities.
- f) The Global Environment Fund, coordinated by the World Bank, supports a project to grow and sell "sustainable coffee" in environmentally-protected areas of Chiapas, at a rate of US\$200,000 a year. The same "GEF" is starting to implement the Mesoamerican Biological Corridors project, which will probably contain a modest sum in support of organic coffee production in Chiapas and other parts of southeastern Mexico.
- g) The Inter-American Development Bank (IDB) has subsidized investment loans to peasant coffee production, through its small-projects facility, in Oaxaca (CEPCO) and Chiapas (SSS Tzijib B'abi and FIECH).
- h) The International Coffee Organisation supports the Common Fund for Commodities which offers, until 2003, marketing-oriented credits to cooperatives.
- i) The Environmental Cooperation Commission supported promotional activities and the development of concepts and norms in sustainable coffee production in Chiapas, Oaxaca and Guerrero from 1996 to 1999.

# Representation of small farmers' interests in policy-making bodies

Representation of the small-scale coffee producers in public policy formulation, through the second- and third-tier independent coffee organisations, is considerable. (See section 1.1.) Prime movers in this area are CNOC and the "Foro Cafetalero", including the Unión Nacional de Productores de Café of the (PRI-based) Confederación Nacional Campesina, the Confederación Nacional de Propietarios Rurales (CNPR), the Confederación Mexicana de Productores de Café (CMPC), and the Coordinadora Nacional de Organizaciones Cafetaleras (CNOC).<sup>46</sup> As noted above, the small farmers' organisations participate in the Consejo Mexicano del Café, although the governmental participants maintain hegemony in that primary body for the formulation of policy toward the sector.

<sup>&</sup>lt;sup>46</sup> The policy options defined in Section 3, below, are based principally on the proposals of CNOC and the Foro Cafetalero.

# 2. Community-level Findings

The importance of coffee in the lives and economy of the men and women in Chiapas was the subject of 15 interviews of peasants – some organized in cooperatives, some not – carried out in June and July 2001.<sup>47</sup>

### A. The appropriation of coffee by peasant producers

The introduction of coffee among the indigenous peasant population in coffee-growing regions of Chiapas began when peons working on big coffee estates brought back beans – often surreptitiously – to plant in their family plots. The mode of production in these areas (The Highlands, the North and the Lacandon Jungle area) was very different from that of the large estates. It was on small holdings, with family labour and in a diversified agricultural scheme.<sup>48</sup>

My grandfather went every year to the plots of "Monte Grande", "Liquidambar", or "Prusia". As the men had to walk many days, my grandmother made tortillas and "<u>matz'"</u> (fermented corn-dough mixed with water which turns into a nutritious and refreshing beverage) that was their food for the onward journey. He mixed up his <u>matz'</u> where he was going so that he could bear the way back home. My grandfather told how one day he hid some coffee seeds inside his <u>matz'</u> before leaving the coffee estate, a few so that the foreman wouldn't notice when he checked the labourers. If they found they were carrying something, they were beaten and put in the estate jail... When my grandfather reached home, he took out the seeds and planted them in the garden behind the house (where they plant fruits, vegetables, medicinal plants and other species for their own consumption), where our first coffee trees came from. This happened many years ago; I wasn't even born yet."

Manuel Pérez Guzmán. 39 years old. Yibeljoj. Chenalhó, Altos de Chiapas

"When I was small boy, I saw coffee plants in the backyard of my grandmother's house, together with the vegetable garden, rue to cure blows, tulipán flowers, medlars, sugar cane to make panela. From this place she got all her fruits and vegetables to eat, her medicines to lower a high temperature and also coffee to drink." Manuel Cruz Pérez. 43 years old. Bapuz. Cancuc. Altos de Chiapas

In many Indian communities coffee was initially grown in a small part of the family garden. Later it was taken to the fields for cultivation. Still, the plant diversity was conserved, including edibles, plants for ritual use, and coffee. This diversified agricultural system

<sup>&</sup>lt;sup>47</sup> The interviews and their analysis was the work of Edith Cervantes.

<sup>&</sup>lt;sup>48</sup> In other parts of the country, particularly in Veracruz and Oaxaca, peasant coffee production has characteristics different from those in Chiapas, due to the fac that the peasants gained direct access to large plots through land reform during the 1920s and '30s.

changed in the 1970s when INMECAFE massively promoted, as part of their technological package, the management of plots as a mono-cultivation, under shade from of the cork, or "chalum" (Inga sp.), tree, which was a model that was adapted from the coffee estates.

"The old customs were forgotten, the technicians from INMECAFE only wanted to see coffee plots with coffee plants and chalum above them. We had to cut the trees and everything else from the coffee fields – oranges, avocados – leaving the fields bear except for the chalum. Chalum grows in the mountains and sometimes in the coffee fields, people ate its fruits. Those who didn't have chalum planted its seeds. If we didn't do it, they wouldn't buy our coffee, nor would we qualify for the visits by the technician."

Domingo Sántiz Hernández. 53 years old. Nichte'el. Cancuc. Altos de Chiapas.

The establishment of coffee growing in the ejidos of central Chiapas happened in the 1970s and 1980s, as promoted by INMECAFE.

"Before, there was no coffee in the ejido. My uncle started planting coffee around 1980 when INMECAFE arrived. On his land he only had coffee plants and chalum trees to give shade. He only had one fourth of a hectare planted in coffee, of the two he had..." Luciano Gómez Pérez. 41 years old. Ejido San Jorge. Central Zone.

"Since I was born we have been farmers, but principally growing corn and beans. *In those days my father only had a small plot of coffee along with two other people, my* grandfather, and a man called Raymundo Pérez. They were the ones that had coffee plots in the ejido. In those days, coffee plants didn't produce much, it was basically corn and beans.

Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone

### B. Establishment of coffee cultivation

Nature defines the coffee zones in Chiapas and in other states. The best conditions for coffee plots between 900 to 1,800 meters above sea level. These are areas that are out of danger of frost. The coffee zones are generally on mountains exposed to humid winds that come from the Gulf or Pacific. This makes many cloudy days during the year and a high humidity level. It is precisely in the mountain areas of the Mexican south-east where most of the Indians and peasants of the country live. The Mexican government started to promote coffee plots to increase the country's right to an export quota under the regulated international market system. The government needed to show additional capacity, even when the areas put under coffee cultivation were marginally adequate.

The Mexican government, and the Instituto Mexicano del Café (INMECAFE), regulated the coffee sector from 1971 to 1989. INMECAFE was a monopoly for Mexican coffee production and commerce, its activities were buying and exporting coffee, agricultural research and technical assistance based on the Green Revolution. The institute neither

consulted nor sought participation of the producers, thus spawning dependence on the institution.

"The crop was for the INMECAFE, they had given an advance payment. Once, the community had a bad crop and couldn't pay the credit. Next year they were denied a loan." Manuel Gómez Ruiz. San Miguel, El Bosque. North Zone.

"Sometimes, out of necessity we had to sell coffee to the "coyote"; he sold it to INMECAFE or to other private businesses at three or four times higher prices." Domingo Santiz Hernández. 53 years old. Nichte'el Cancuc. Altos de Chiapas

"With INMECAFE the advance payment was always late and never enough for our family's needs. The second complementary payment was also late or even never arrived. Also, the staff of INMECAFE forced a lot of discounting of our coffee because it was bad quality. We knew it was good, high quality coffee. They got us coming and going. We had to sell to INMECAFE because they had given us a loan."

Sebastián Vazquez Pérez. 49 years old. Naranjatik. Chenalhó. Altos de Chiapas

"When Majomut started its organisation in 1981, the people from INMECAFE said that the organisation was destined to fail because they didn't know how to market the product, that they didn't know the market, that the cooperative needed technicians from the cities. According to INMECAFE the independent cooperatives couldn't succeed because they needed people with studies, that only people with studies could make it happen. When Majomut started, it was the peasant leadership that did the marketing. They didn't have experts as advisors. It was the peasants alone."

Lorenzo Santis Gómez. 46 years old. Nishte'el. Cancuc. Altos de Chiapas

The expansion of coffee production in Mexico is due to peasant Indian producers, even though the governmental policy-makers frequently have the large producers and the exporters in mind when they make policy.

### C. <u>Coffee's importance in the peasant economy</u>

INMECAFE's work was based on the needs of the peasant family to obtain cash income. Previously the domestic economy was based on self-sufficient production of food, augmented by temporary jobs found outside of the community. The option of producing coffee meant that it was less necessary to leave the community and possible to supplement income. For many families the money from coffee has become their main and almost unique source of income.

"The money to buy things comes from my coffee plot. Now I don't have to go somewhere else to have money. From 1981 I am here working in my coffee plot. My sons don't have to go out to work, now they have their coffee production."

Manuel Gómez Arias. 45 years old. Tallukum, Chenalho. Altos de Chiapas

"Before, I wasn't producing organic coffee, though my trees were in a sort of natural state. Majomut has taught me how to work organic, with composting. Now I am working on it, now it is all right. Now I am happy. Very good coffee is produced". Sebastián Vasquez Pérez. 49 years old. Naranjatik. Chenalhó. Altos de Chiapas

### 2. CHANGES IN TWO GENERATIONS

#### A. From corn to coffee

Before the establishment of coffee cultivation in peasant and Indian communities in Chiapas, the family economy was supported by the millennial productive system of *milpa*<sup>49</sup> and periodic entry into the workforce, principally on the Soconusco coffee estates. The *milpa* supplied food (corn, beans, squash, chile peppers, amongst others). The migration to the estates was done during the harvest season. All the persons old enough to work went to the coffee farms, including children that could endure the long walks, the mistreatment and the work on the estates. When they returned to their communities, it was in time to plant the *milpa*.

"We went, my father and brothers, to the estate to harvest coffee. This was in September and we had to walk a lot: five days going, as well as five days returning. We arrived back in the community and started the milpa: burning, breaking the soil, planting and that way we continued. This was around March. We started our work to obtain our food."

Sebastián Vasquez Pérez. 49 years old. Naranjatik. Altos de Chiapas

The dynamic was transformed radically from one generation to the other due to the establishment of coffee plots in peasant and Indian communities. This occurred in some areas in the 1950s-60s, and in other areas thereafter.

"We learnt about the coffee plots when we were working on the estates. There were no coffee plots in Taklukum. Only mountains and milpas. By 1976 and 1977 coffee plants came to the community. The community had been dedicated to the milpa. To have some money all the men from the community went to work to the estates."

Manuel Gómez Arias. 45 years old. Taklukum. Chenalhó. Altos de Chiapas

Another element was the change in the landscape. The corn-growing communities changed with the establishment of coffee in the minifundia.

<sup>&</sup>lt;sup>49</sup> The *milpa* is an integrated multi-crop plot, dominated by corn, and including beans, squash, chile peppers, and various vegetable greens and medicinal plants. The *milpa* system traditionally relies on a productive-fallow cycle of some 20 years, though now agrochemicals are replacing that system. The *milpa* is designed to provide food for the family; it is not normally a productive system intended for a market outlet.

"Before there were no coffee plots here in my community. Before we worked only milpa. Some had cattle. That's the way we used to work. Now people's products have changed. In 1981 I thought of planting my coffee. Now I work my coffee plot". Manuel Cruz Pérez. 43 years old. Bapuz. Cancuc. Altos de Chiapas

Agricultural practices changed. Those who were 50 years old or less left off the old ways of agriculture, and their sons and the new families were now embarked on coffee production.

"I inherited from my father a piece of land where he had his bull. Before there were no coffee plots. We, the sons, inherited from father, land where there were no coffee plants, they only had milpa or wilderness. Later, all his sons became coffee growers. Around 1983, first my brother Agustín planted his coffee and entered the organisation. My father worked one way and we, the other; we became coffee growers. I want my sons to be like us, they should continue being coffee growers."

Juan Luna Pérez. 40 years old. Polhó, Chenalhó. Altos de Chiapas

"We are 10 brothers and sisters. We are six men, one died. Four of them are coffee growers, five with me. My four brother's families are also coffee growers. We are all in Majomut. Only my brother Mariano (he is a teacher) is not in Majomut".

Sebastián Vasquez Pérez. 49 years old. Naranjatik. Chenalhó. Altos de Chiapas

#### B. From migrant families to families belonging to a community

Coffee cultivation in marginal zones has permitted the reestablishment of community.

"I worked on the estates. It was sad. Work is very hard, there. There's coffee that is very difficult. I work to enrich a kaxlan (mestizo). There, at the estates, it is very difficult to work. I wake up at one am. At four pm, I go and ask for my food, I can rest until 6 pm. Alone I go to the estate, to look for money... My wife stayed home."

Manuel Gómez Arias. 45 years old. Takiukum. Chenalhó. Altos de Chiapas

When I inherited my father's land, I planted milpa and coffee. Milpa for corn, for food. I prefer to work in the coffee plot than to go somewhere else to work, that's the way I like. My friends also work with their parents in the coffee plot. They don't go to work outside Taklukum."

José Guadalupe Gómez Pérez. 17 years old, single. Takiukum. Chenalhó. Altos de Chiapas

The seasonal migration to the coffee plantations lessened and the Indian communities were able to support more of their population without having recourse to outside labour.

"I used to go to any coffee estate: Liquidambar, Monte Grande, Prusia, Catarina, Sólo Dios, Permuti, Juárez, Esstrella, Zapote Estates. Uuuh, I know everywhere there. The other side until Tapachula. I was a small child, I went with my father. We went, the grownups and the children, all my brothers."

Sebastián Vásquez Pérez. 49 years old. Naranjatik. Chenalhó. Altos de Chiapas.

"Before, when I was a small boy I went to work on the estates, with my father and my elder brothers, and the smallest also. All the men went to the estates. My mother and sisters stayed back here in the house. Later, when we became coffee growers and became part of Majomut. we could all live in the community."

Manuel Gómez Arias. 45 years old. Takuikum. Chenalhó. Altos de Chiapas

Before growing coffee, the ejidos that were close to the big cities of central Chiapas also established a migratory dynamic to sell their labour force in the construction of hydroelectric dams and road constructions.

"During the season where there was no corn planting or time to clear the fields, I went to work. Since I was 14 years old, I worked outside the community, especially in construction work, in 1975 approximately. My father never left for outside work. He was always working in his fields. When my brothers grew up, they went out to work. My sisters made bread. My mother made bread. That's the way we had enough for our needs" Rosario Gutierrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone.

"The first time I went to work outside I was alone. Later my brother Manuel also came. I used to go to many places. To Tuxtla Gutiérrez I went to work in construction, likeof roads, with some companies. It was hard work, working with companies or with private people. But in those days you didn't have any choice, we had to go outside to work. We had to look after our brothers and family".

Luciano Gómez Pérez. 41 years old. Ejido San Jorge. Central Zone

### **3. DIFFERENCES IN ORGANISATION**

Some coffee growers belong to cooperative organisations and others do not. The coffee growers organisations have become important social actors in Indian and peasant regions of the country. We will mention that in Chiapas 10 % of the small coffee producers belong to organisations gathered in COOPCAFE. The promotion of the organic production done within this organisation means that 80% of the organic coffee production in Chiapas is produced by small producers.

### A. Non-organized families of coffee planters

Since 1989, the coffee growers families and communities confront a deregulateded national and international market. The conditions of free trade put the peasant's economy in a very disadvantageous situation. With the disappearance of INMECAFE, a chain of

intermediaries appeared. They are formed by intermediaries and by the representatives of coffee commercialization companies that have their offices in the productive regions. They offer a lower price, of course, compared to that of the coffee cooperatives.

"INMECAFE disappeared and where there was no organisation, coffee was given to coyotes because there was no other way. Prices went down and people became even poorer."

Lorenzo Sántiz Gómez. Nichte'el. Cancuc. Altos de Chiapas

"There's a coyote that goes from house to house in the community. Then he sells to a bigger coyote that stays in the town. He sells it in Bochil, he is something like the regional coyote. And the one from Bochil sells it to another coyote that is a company in Tuxtla Gutiérrez. There is where coffee gets dried, they process it there. This company is the representative or the branch of a bigger one. This company is the one that exports the coffee. The producer gets very little from his work."

Manuel Gómez Ruiz. San Miguel. El Bosque. North Zone

The family that sells individually faces a local intermediary that can manipulate and rob. The calling of the intermediary a "coyote" is a reference to the animal that eats and lives on what he robs from the pesants' houses (hens, pigs, sheeps). The economical fragility is only increased by the dependency that develops on the part of these families to the local loansharks.

"During the harvest seasons, in market days they come to sell their coffee in the town. Some kilos for the weekly expense. There is always a coyote who sells the coffee to another big one that stays in San Cristóbal, he belongs to a company".

Miguel Cruz Pérez. 43 years old. Bapuz. Cancuc

"We don't know the coffee price in the international market, we don't know if the price that the coyote pays is a lie or not, he must be robbing us. Also, the scale has some trick and he discounts weight from the sack. Any way he fucks us in the price or in the sack's weight ".

Andrés Pérez Gómez. San Cayetano, El Bosque. North Zone.

"When someone in the family gets ill, it is very hard. I have to ask for a loan to buy the medicines, to heal the patient. Here in the community there's a man that lends me money with a 10% monthly interest. If I don't have money, I have to pay with the coffee or corn crop."

Andrés Pérez Gómez. San Cayetano, El Bosque. North Zone

All this without thinking about the periodical crisis in the international market, where prices collapse and the income of the small coffee growers are reduced considerably until they have to abandon the plots and migrate definitively.

"Right now the coyote pays \$3.50 per kilogram. This is not enough. For being coffee growers, the government's emergency program gave us \$600 pesos; it is a joke. The coffee plot is not worthwhile, there is no support. They are selling the coffee plots. It is sad to see it, because there is a lot of work invested, we have worked with coffee for many years. But the wife and the sons and daughters have to eat. If they don't sell it they go to the North just like that, they abandon their fields. There's no work here for the poor people."

Iram Herrera Solis. Pesant's advisor. 37 years old. Motozintla

### B. Organized families of coffee planters under the conditions of free trade

The independent coffee producers' organisations, active since the later part of the 1970s, export directly their product, thus weakening the regional network of intermediaries. The organisations also become regional regulators of coffee prices because they pay their members a better price than the one offered by the intermediaries. The organisation assumes the risk of transforming and marketing, which was previously the work of the exporters. They used to present it as a very complex process and kept it for their own interests.

"Before, the prices used to go down and down. But the price that the cooperative pays is higher than the coyote's. We have fought to sell the coffee under free trade market but it hasn't been possible. At least, in the cooperative we obtained a better price than the coyote's, that's why we are part of the organisation."

Manuel Gómez Ruiz. San Miguel, El Bosque. North Zone.

### C. Organized families of coffee planters under the conditions of free trade

Initially in the direct access to the export markets and later the "collective appropriation of the productive process" (transformation and marketing of parchment coffee, and warehousing), the steps that coffee organisations have followed indicate changes in their conception of the productive and marketing processes. We are talking about organic agriculture and fair trade. The first is a search for production alternatives where the product's quality and the environment, favour feasible conditions and in long run for the future generations. The second is a new type of relationship between producers and consumers. Although the sale of green coffee meant an advance in capturing added value, the greatest part of the profit still remains in the roasting and retailing of the product. }

"Since we have been three years in the free trade market, the coffee price hasn't dropped"...Today the coyote pays \$7 pesos. Majomut cooperative pays the conventional one at \$12 and organic gets \$18. The earnings with my coooperative are better." Sebastián Vásquez Pérez. 49 years old. Naranjatik. Chenalhó. Altos de Chiapas

#### **4. CONDITIONS OF LIFE**

#### A. Land

There are two forms of communally-held property: the "ejido" and the "comunero" community-held property. The latter is a type of land registered by the Mexican government to identify ownership of lands in the indigenous settlements. Family property is inherited from father to son (unless there is an only female child). Settlements, known as "*parajes*" will be made up of family "clan" groups. Each member of a clan has the right and obligation to receive land, to cultivate it and trasmit it under the name of the ancestors who have cleared it. nside the nuclear family and as the sons get married, the father distributes equally the goods that he owns. In indigenous communities the average andholding is two hectares, which may frequently be made up of very small plots in diverse parts of the *paraje*. It is also possible for persons to borrow the use of lands in the possession of family members or others in the *paraje*.

"We are six brothers. When our father inherited us the land, I got half hectare of uncleared land. There's where I started my coffee plot. Now I have 600 organically produced plants. This coffee plot is around fifteen years old. I have two other pieces of land with coffee, that is another half hectare, those are not an inheritance, they are a loan. My uncle lends them to me. I pay for the crop with food and refreshments, I also invite him. No, I don't give him money, nor coffee, for the land he lends me. I don't rent land." Pablo Vásquez Vásquez. 25 years old. Naranjatik. Chenalhó. Alto de Chiapas

Besides offering food, the payment for the "loan" can include help in certain agricultural tasks that the lender ("cesionario")needs. The enlargement of coffee areas sometimes is based on the purchase of land.

"I inherited the land where I have my coffee plot, through my father. In this piece I have 600 plants (1/2 Ha.) But before this used to be an uncleared land, not a coffee plot. I have another piece that I bought, I have a coffee plot there, I have 1, 700 plants (1.5 Ha.) in Naranjatik Bajo (close community). I have 2 Ha. of milpa, here in Takiukum. I don't rent land and don't have any loan."

Manuel Gómez Arias. 45 years old. Takiukum. Altos deChiapas

In 1857 the laws that protected communal land of Indian people disappeared from the liberal constitution. In Chiapas, the last peasant rebellion (1910) begat an irregular and tardy agrarian reform. The ejido is a land endowment made by the Mexican government to heads of family of a community. The land is divided between the number of people that

constitute the ejido. Until 1992 it was a property that could not be sold. Now under certain circumstances it can be, as part of the liberalization of the countryside.

"I didn't receive land as my father's inheritance. My father is an ejidatario and lives in the same ejido as I do.... I had the opportunity to own this land because my uncle transferred me his rights when he left to Tuxtla Gutiérrez. There I had a place to plant my own coffee, having a place where I could cultivate it. Then, after getting married, after I got married two years later. We are 40 ejidatarios in the ejido Vicente Guerrero, Each ejidatario has 11 Ha. with its property certificate."

Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone.

The paraje has a dispersed population pattern, with houses often close to the milpa. The milpa and house compound will have distinct areas for self-sufficiency food production, and, often on more hilly lands, the coffee plot.

"My house is in a different land, it is a property of three hectares. There's where the community was founded with three main streets. According to my father it was founded in 1940. The settlement is separated from the ejido, you have to take the road to the ejido. The land where we cultivate corn and beans is around 320 Ha. In this place each ejidatario has 8 Ha. Beyond, there is a mountain zone where the agostadero was. There are around 120 Ha., three per person. There's where some ejidatarios have their coffee plot." Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone.

"The coffee plot is in the "agostadero" former pasture area. All my three hectares. are with coffee. In the "parcela", I have 8 hectares, I have a part of corn. There I also have half hectares of coffee I just planted it, it is not producing yet; I use the rest of my land for wood and for my two or three animals".

Luciano Gómez Pérez. 41 years old. Ejido San Jorge. Central Zone.

Lack of land and other factors have resulted in the reduction in the number of family members. Those interviewed came from families of ten or more children and they in turn have four to six members.

### B. Productive resources

With the appearance of coffee in the peasant and indigenous communities of Chiapas, there is diversification beyond the basic grains. The coffee plot is usually a form of agroforestry activity. This productive system includes management of biodiversity, all in a complementary fashion, as is seen commonly in all of Mesoamerica.

"My father willed to his sons lands where there was no coffee plot, only had milpa or uncleared fields. Now I have my land where I make milpa. Here, close to my house I have the coffee plot. In the coffee plot I also have fruits, chalum, orange, lime, avocado, anona, cacaté..." The coffee plot is an imitation of the natural ecosystem. There are three layers of plants, from the high trees to the groundcover. This vegetative distribution converts the coffee plot into an intensive cultivation. The location of the coffee plot in the steeper mountains restrains the degradation process of the soil. This is the notion of "slope agriculture".

The management of the coffee plot has implied the capacity of the indigenous population to maintain many plant species. The characteristic of organic agriculture, fusing traditional knowledge with the modern (agroecology), can be qualified as constituting a "third science", which is practiced outside the walls of the academic and research institutions.

"There should be 16 different types of plants besides coffee in each Ha. of organic agriculture. There are many members that have more than that. When the organic program started, there was an interchange of plants between communities to diversify the coffee plot. Now you get plants with our neighbors, with your family. There are many different types of plants besides coffee because they are very well accomodated, they have a good arrangement. The trees are first and they are used for shade, then the section where coffee plants are, together with other plants and then the herbs, where the living barriers are so that the soil won't be erosive. From the trees, bushes and herbs you can also obtain food, medicines and now and then some wood. That's the way the grand parents used to do, that's the way we continue to do. Everything in the coffee plot is utilized to preserve the coffee plot or to cover our needs."

> Juan Luna Pérez. 40 years old. Polhó. Chenalhó. Altos de Chiapas Peasant promoter

The organic agriculture promoted by the coffee organisations wouldn't be possible without mechanisms of horizontal participation that allows a "popular" appropriation of knowledge (peasant to peasant, promoters' training and peasant communal promoters). This contrasts with the government-promoted model characterised by its verticality, bureaucracy and promotion of technological dependence.

"My public activity in the community is being an organic promotor. My working group is with 37 members. The community choose me... To know about the organic work I go to the workshops, there's where the training is done with promotors, engineers and technicians from Majomut. Later I go to my group to train them and I also visit their work on their plot."

Manuel Gómez Arias. 45 years old. Takiukum, Chenalhó. Altos de Chiapas

There is an empathy between organic agriculture and the indigenous productive culture that has allowed its thorough appropriation by the coffee growers families.

"When I die, my sons will continue the path of organic agriculture. Making compost -that is like the soil's food-, the living barriers –so the soil won't be wasted-, working, cultivating their organic coffee. Keep the earth without putting in poison (fertilizers). This is the land that I inherited from my grand parents, from my father. It is the one that my sons will inherit." Pablo Vásquez Vasquez. 25 years old. Naranjatik, Chebalhó. Altos de Chiapas

One sees very different environmental impacts from Green Revolution-styled systems with heavy agrochemical inputs and single crop production versus organic systems which also consider the benefits to biodiversity in general and not just those species which are used by humans. The social and economical logic of the green revolution is based on the formation of a capitalistic peasant that depends on outside income to buy materials and then which producion is incorporated into the market.

"After two or three years of putting fertilizers to their coffee plants, people realised that it was bad because it diminished the earth's strength. But they had to do it again because INMECAFE told them to. There was no alternative. The only ones that gave technical assistance were the INMECAFE technicians."

Domingo Santis Hernández. 53 years old. Nisthe'el. Cancuc. Altos de Chiapas

"The respect for nature was lost. Instead of feeding and taking care of the earth, what we did was to poison it. If we had continued that way, right now we would be poorer, with non-productive land, with the lie that only with chemical fertilizers we could increase the productivity, without a future for our sons and daughters."

Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone

"To do the organic program we had to look back, rescue the ways our grandparents had worked the coffee plots. For INMECAFE the "parcela" had to have only the shade of chalum, for us it had to be diversified. INMECAFE said that only with fertilizers the productivity would increase, for us it was with compost without polluting the earth. The compost and living barriers are done with local materials, we don't have to spend money to improve the production. Many works from the coffee plot were learnt with the organic production.

Juan Luna Pérez. 40 years old. Pölhó, Chenalhó. Altos de Chiapas

Cattle growing in the Mexican southeast is another recently de-emphazised policy which had a very negative environmental impact. extensive cattle-raising in the tropics was promoted during the 70's by the Mexican government. It had as a consequence the concentration of land in the hands of medium- and large-scale owners. Forest lands were much reduced. As a result there is serious ecological deterioration of the converted agricultural land which is irreversible in cleared soil.

"In 1982, I was the president of the "comisariado ejidal" in Vicente Guerrero. In those days that land was for "agostadero" in common wealth, but we divided it. It was mountain. Then, some of the ejidatarios started to cut trees, to cut the mountain. We had to implement protection measures for that area. One of the protections was to plant coffee. We stopped the ones that were cutting, we had to stop them cutting. We started the coffee program and the agreement was that we wouldn't introduce cattle, only coffee. The ones that were cutting were 6 or 7 people. It was a community measure to preserve that area that is like a reserve. One of the conservation measures was to plant coffee, other was not to cut anymore. People who don't have coffee plot, have this area as a reserve, for wood, for service."

Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone

### 5. ATTAINING SATISFACTORY LEVELS OF CONSUMPTION

The coffee growers tend maintain the *milpa* system as a means of reducing risk, particularly with the great volatility of the coffee market. This means that these farmers maintain the capacity to keep local varieties of germplasm (corn, beans and other associated species) in continuous use and adaptation.

"We eat daily corn in the form of tortillas, and pozol (gruel). Beans according to the season: botil, red. We eat other vegetables also, if the milpa has, chili pepper, yuca." Domingo Santiz Hernández. 53 years old. Nichte'el, Cancuc. Altos de Chiapas

"Every year I plant milpa. There I plant corn: yellow, white, red, black not much because it iss for special occasions. I plant beans: botil, red and others. I also plant pumpkin and chilacayote, vegetables as yuca, yam. There, where I make my milpa, everything grows. From my land, my milpa, I get my food, I don't buy somewhere else, here I work on it and I get my food".

Sebastián Vásquez Pérez. 49 years old. Naranjatik, Chenalhó. Altos de Chiapas

This productive space may be self sufficient, but it can also have some deficiencies according to the the family consumption pattern.

"Corn and beans from my land supplies me all year long. From my 2 Ha. I obtain 20 zontes (1, 320 kilos) that is enough for my family for one year. Beans by litre, around 30 litres (480 kilos) for one year. 4 cuartillas has a litre. I don't buy corn nor beans." Manuel Gómez Arias. 45 years old Takiukum, Chenalhó. Altos de Chiapas

"Fifteen zontes (990 kilos) of corn from three-quarters of a hectare, and beans und 20 litres (320 kilos). I complement the food I need with money from the coffee. I have to buy corn and beans."

Pablo Vásquez Vásquez. 25 years old. Naranjatik, Chenalhó. Altos de Chiapas

Other productive space, not less important, is the agriculture and poultry that is ubiquitous to the peasant family house and surrounding area.

"I harvest one and a half tonnes of corn per hectare. There are three tonnes in total from the two hectares that I use for this cultivation. The biggest part is to consume, other is for the corral animals: chicken and two porks. We consume tender corn during it's season. I cultivate little beans, 500 kilos is enough for the annual self consumption ". Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone A peasant house often has two structures: the living-sleeping space and the kitchen. Both have tamp-earthen floors and are constructions done with local materials. There is a permanent fire that witnesses the hard work of women. Remodeling the house with industrial materials (bricks, cement, etc.) obtained by the income from coffee plots is totally out of the reach of families.

"Money from coffee growing is not enough to improve the house. Only for the mill. This is used to grind corn and prepare the dough. For some pots (clay) or frying pans that you buy in the store".

Juana Sántiz Pérez. 44 years old. Niste'el. Cancuc. Altos de Chiapas

It is very important to maintain sources of firewood for the peasant family. Woodgathering, carried out principally by the women, occurs in land left fallow where young trees are growing as well as in the forest itself. Of course agroforestry is a strategy that allows the family to obtain firewood and agricultural products.

"I have a piece of land in the mountains, it is a reserve. From there I am going to get my firewood. My son and I go to bring it. From there I got the wood for my house boards."

Manuel Gómez Arias. 45 years old. Takiukum, Chenalhó. Altos de Chiapas

"To take away some shadow from the coffee plot we cut an ash tree, from there I got boards for a table and chairs that someone made here in the community." Sebastián Vásquez Pérez. 49 years old. Naranjatik, Chenalhó. Altos de Chiapas

Gas stoves are becoming more common, as of late. The expense, of course, is considerable for the peasant family.

"From the rest of the area of my corn "parcela" I obtain wood for the house use, also firewood. We have a gas stove but we usually use wood to prepare our food. Every saturday I go with my son to pick up firewood for the weekly use. This year I made some repairs in the house, I made a contention wall that cost around \$2,500 that came from the coffee plots."

Luciano Gómez Pérez. 43 years old. Ejido San Jorge.

In addition to food, plants are used for rituals and for their medicinal properties.

"For my food I take the fruits from my coffee plot: bananas, plumbs, lime, avocado, cacaté; vegetables, tree tomato, malanga, chayote. It also has medicinal plants: fennel, floripondio, nichim animmá..."

Juana Sántiz Pérez. 44 years old. Nichte'el, Cancuc. Altos de Chiapas

Thus coffee and any other strategy for obtaining cash income is increasingly important for the peasant family. In that sense, the fair trade initiative has affected the peasant economy, improving their caloric and protein intake and improving the housing in which they live.

"Money from coffee is for food (to complete the food that the land doesn't give). We buy meat once a week, each saturday, there in Yabteclum where they kill bull. If I have in my house I eat chiken once a week and eggs daily. But now there has been a lot of illnesses around, right now I don't have here in my house so I will buy one in Yabteclum a farm chicken. Money from coffee is being spent little by little in food (that the land doesn't give)".

Manuel Gómez Arias. 45 years old. Takiukum, Chenalhó. Altos de Chiapas

"The main food that we consume is corn, beans have to be on the table together with some vegetables, eggs, sometimes combined with meat. Meat is like helping the food a little bit, we eat it twice a week."

Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone.

Families use the income from coffee for other expenses of materials considered crucial or merely desirous.

"I buy my dress. I buy my daughter's dress. I buy my dress in Yabteclum. The blouse is very expensive, \$200. Two blouses in one year. Skirts only two and one belt, it is around \$300. The same for my daughter. My skirt is more expensive than my husband's pants. In April I buy my rebozo, shoes, laces, everything."

Julia Pérez Pérez. 42 years old. Takiukum, Chenalhó. Altos de Chiapas

"Me, I just buy two, only two clothes. Two pants and two shirts per year. Right now I am with my working clothes. I also have my traditional outfit. I only use it in festivities." Manuel Gómez Arias. 45 years old. Takiukum, Chenalhó. Altos de Chiapas

But for families that do not participate in the fair trade sale of their coffee, consumption is reduced.

"Now we are not eating cow's meat anymore. We still eat eggs because we have hens and chicken. Once every 15 days or every month my wife kills a chicken to make broth with vegetables. Every day we eat tortillas, beans, pozol, coffee, sometimes bread... The land supplies with corn and beans, that's why we don't pass through a difficult situation. This year we haven't purchased clothes, the little money we have from coffee is kept in case the milpa is not good this year."

Manuel Gómez Ruiz. San Miguel. El Bosque

"The expenses done with the money from the coffee sale are very little. Three years ago the family could buy some clothes with coffee's money. Now we buy less; we buy clothes if something is left when my son returns from his construction work, after paying the debts. I

had to ask for a loan so I could buy corn and some beans, because last harvest wasn't enough. From my parcela we only harvested 800 kilos of corn (1 Ha.) and 200 kilos of beans. The coffee sack was paid by the coyote even less than last year. Coffee doesn't give not even for food, we have to go and look for money somewhere else so the family can eat, to buy some tools to make the work at the coffee plot."

Andrés pérez Gómez. San Cayetano. El Bosque

The expense of children's education in the case of families organized in conditions of free trade market is occasionally considered important by the peasants of the ejidos of central Chiapas. It is transportation, rather than books, that most matters, since the latter are supplied free of charge.

"My family needs 50% for different expenses. Food, clothes, some house utensiles. For my small children's education, around 30 pesos daily for the transportation of the boys that go to secondary school... Little by little you go administrating the money. The most difficult time is in July, August till September. We have the time and reserves already measured by the beginning of the harvest season. During this time (July till September) I have some corn left, I get some help from it's sale..."

Rosario Gutiérrez Villareal. 48 years old. Ejido Vicente Guerrero. Central Zone

Families unable to sell their coffee in terms of fair trade frequently have to pull their children out of school by the time they reach the age of 12 or 14 in order to help with chores, especially when the head of the family has had to leave the home to look for remunerated work.

#### B. Production inputs

Producion inputs are of two sorts: labour, supplied by the family, and land.

"From my land, of one hectare, I got 11 sacks of organic parchment coffee. Each sack weighs 60 kilos. I received 12 pesos a kilo, in the fair trade scheme. In all, I got \$7,920 pesos. What I wrote down in my journal: fifteen days work in pruning, five in making compost heaps, 10 in the "life walls" of deep-rooting plants, three in planting coffee plants, three in weeding, eight in fertliising, and three in the biological control of pests. For the harvest, I did get a helper, and paid him 20 days. From the depulping and washing and all the wet-processing, I figures there were more days, of course. I figures it was 121 days of work in all... I paid \$30 pesos a day, so that was \$600 pesos."

Pablo Vázquez Vázquez. 25 years old. Naranjatik, Chenalhó. 1999-2000 harvest. Fair Trade Participant

"Last harvest I got about 1,800 kilos of organic parchment coffee from my three hectares. I received about \$24,000 pesos (\$13/kilo). A good part of that money I reinvested in the next harvest, to maintain the coffee plot, weeding, pruning, etc. The greatest part is used in the harvest; it's more than half of the days that I pay. I figure that the upkeep of the coffee plot takes about 100 to 120 days of work, about 50 or 60 of which I pay to have done. So I pay between \$6,000 and \$7,000 pesos, depending on whether its 30 or 40 pesos a day."

Rosario Gutiérrez Villareal, 48 years old, Ejido Vicente Guerreo.

The need for outside help in order to bring in the harvest is a matter of size of plot versus size of family.

"When it's harvest time, my sons, my wife and I all come together. Flor Idalia and Heriberto are in school. But in the afternoons, when they get back, they starting cutting the fruit too. Everybody helps in the depulping and the washing. But it's really in the harvesting that one most needs outside help."

Rosario Gutiérrez Villareal, Ejido Vicente Guerrero.

When the price of coffee internationly is so low, it means that the value of the work of those involved also goes down. As a self-defence mechanism, then, the family will devote less time to upkeep, or if the owner has several small plots he or she may devote time to only one. But the difference in price from fair-trade and conventionally-sold coffee is every-present.

"On my one hectare I got 10 quintals of parchment coffee. I received \$3,500 pesos (\$6/kilo). We did it all alone, in my family; no outside help was contracted. That hectare of land took about 90 days of work. My only consolation is that at least none of the money was left in the hands of the coyote. But the price is lower and lower and it doesn't last even for our necessities. Last harvest it was around \$7 per kilo; and now it's lower. The only possibility for the future that we see is organic coffee, since they don't apply the differential, like to the conventional coffee... Anyway it's years since I've used any chemicals..."

Manuel Gómez Ruíz, San Miguel, El Bosque. Tzotzilotic Tzobolotic (not fair trade)

"First I sold three sacks (180 kilos, parchment coffee); this time it was at \$5 pesos a kilo and they gave me \$900... From the following cuttings, I got another three sacks. There the coyote from Bochil was paying \$4, because he said that the price was continuing to bottom out, so that for the same quantity of coffee I only received \$720. The harvest was between six and seven sacks for three-quarters of a hectare. Even though we were working hard, we didn't get enough for even what we eat. My son is working in Villahermosa in construction, because there's no work in coffee... Before, coffee offered a bit of money for the expenses of the family, now no more..."

Andrés Pérez Gómez, San Cayetando, El Bosque (not a member of a coopeative)

Materials for the organic farming come from nature, which in turn has been "fed" by the previous generations, so that it really isn't possible to monetarise all the inputs.

"Compost is made from the cofee pulp, other materials like chicken or horse manure, stuff from the forest like mulch, banana leaves, then con husks, and the ashes from the hearth. When there aren't enough ashes, then one buys lime, to bring down the acidic levels of the compost... Everything can be obtained in the community, from the harvest and from the house. Only the lime we buy."

Pablo Vázquez Vázquez, 25 yearts old. Naranjatik, Chenalhó.

"I don't need any other input, except paying for some helpers, because we get everything we need for the composting. We gather the materials. Rosario Gutiérrez Villareal, Ejido Vicente Guerrero.

Tools are not a major expense. The greatest "capital" expenditure is in the biomass and in the accumulated knowledge of the coffee growers.

"To work the coffee plot, one buys machetes if needed, that will cost about \$90 pesos each. Then if you don't have a flat stone, you'll buy a file, that cost between \$5 and \$10. To plant corn, you need a planting stick, at about \$50, and a hoe, which will cost you \$70."

Manuel Gómez Arias, 45 years old. Takiukum, Chenlahó.

"Regarding tools, we use principally machetes to prune and clean with, sometimes hachets for the heavier work. We don't buy a lot of tools. The principal expense is the labour we have to contract."

Rosario Gutiérrez Villareal

It's in the depulping and the drying processes where somewhat more onerous expenses occur.

"My depulping machine cost me \$460 pesos, three years ago. The washing and fermenting tank, I make it with wood planks that I get locally. My wife and I do the depulping and the washing, because our children are too small. The water we use for the washing we carry it in buckets from the river. We built a drying patio of 7x8 metres, and it cost about \$1,000. We don't bag the coffee in plastic because it ruins the bean." Pablo Vázquez Vázquez, 25 years old, Narnanjatik, Chenalhó.

# 3. Policy Options

Coffee policy carries important political as well as economic consequences in Mexico. Coffee-producers are numerous, particularly in the Southeast, where peasant unrest is endemic and where natural resources (water, forest, biodiversity) are richest. The present, spiking out-migration is a strain on the rest of the economy. Coffee is by far the most environmentally benign, widespread peasant agricultural strategy, and there are no very convincing short-term and quickly-reproducible diversification strategies. The small-scale coffee producer sector is remarkably well organized, in comparison to other peasant subsectors. For these reasons, the policy debate around coffee counts.<sup>50</sup>

Policy options are hardly limited to Mexico, as the problem is one of an international market in which a handful of doubtlessly colluding buyers is taking advantage of a real, very large supply surplus.<sup>51</sup> Options, then, include: (a) collective action among producer countries to limit supply (in practice, not able to be sustained, so far); and (b) negotiation between producing- and consuming-countries based on common interest in a sustainable productive model, and in the name of decency (considering the extreme privation radical liberalisation of the market has created in small-scale producers' lives).

But the future will not be a simple return to the regulated market of the ICO; it will be more closely based on comparative advantage and niche marketing. Mexico's climate, geography, collective know-how and contacts dictates a strong continuing role in the coffee market, with a better-quality, better-recognised product.

In sum, the crisis of plunging coffee prices in 2001, in the context of the dramatic and draconian cutting of price supports and other services to the agricultural sector as a consequence of NAFTA, clearly is spawning a grassroots movement in which the coffee producers play a lead role in terms of mass mobilisation and also in terms of the development of policy considerations.

### Supply management, or retention, initiatives

As signatory of the North American Free Trade Agreement, the Mexican government is committed to non-interference in international markets. Nevertheless, the history of

<sup>&</sup>lt;sup>50</sup> By July 2001 the price of coffee had descended to US\$53/100 lb sack, the governors of eight states (Chiapas, Oaxaca, Veracruz, Puebla, Guerrero, Hidalgo, Nayarit, and San Luís Potosí) banned together, calling the crisis a matter of "national security" – in reference to the economic disaster suffered by potentially rebellious masses of poor peasants, and called for an emergency fund to be created to compensate coffee-growers for their losses. It is interesting to note that the justification for expenditure of public funds to alleviate the coffee-sector crisis includes an "historic debt", with reference to the fact that for 60 years coffee brought in foreign exchange permitting the nation to industrialize. (*La Jornada*, 18 July 2001; 43)

<sup>&</sup>lt;sup>51</sup> The great differential between the consistently high consumer prices and the (still-declining) producer prices suggests collusion, of course. The Mexican government reportedly has been investigating collusion among major exporters, with two cases concluded without indictment and two cases pending. (Juárez interview, 12 July 2001)

Mexico's participation in the international coffee retention plan demonstrates that the small-scale coffee sector is sufficiently strong to challenge this basic governmental policy.

Indeed, the Coordinadora Nacional de Productores Cafetaleros (CNOC) provisionally convinced the Mexican government to support the Retention Plan of the world's producer organisations. CNOC organized a national demonstration of coffee producers on 15 March 2000 in Mexico City. In April of the same year, CNOC and the CNC participated, as representatives of civil society, in a meeting of Latin American producer organisations, in Costa Rica; the Mexican government was convinced to speak in support of measures to control the volatile coffee market, and even assumed the role of hosting the subsequent meeting of the group at the end of April 2000. In the interim, a debate took place within Mexico. Small-scale producer groups supported the retention plan, but large-scale producer groups preferred a proposal that the government buy and destroy low-grade coffee – that, principally, of the large exporters – and as a result the Mexican government left off open support of the retention plan. On May 19<sup>th</sup>, the retention plan was approved at the London meeting of the Association of Coffee Producing Countries (APPC) and – thanks to the pressure applied by the small-scale coffee producer groups – Mexico signed on.

Mexico agreed that in the 2000-2001 harvest it would (a) retain 350,000 60-kilo sacks, according to the APPC plan, (b) increase consumption by 200,000 sacks, and (c) postpone placement on the market of 450,000 sacks until the end of the harvest season. This plan would have affected approximately 1,000,000 sacks of coffee, or 20% of the national harvest. As luck would have it, climatic conditions that year reduced the Mexican harvest, by natural means, and the plan was never carried out.

Other forces opposing market manipulation were:

- 1) The Banco de Crédito Rural (Rural Credit Bank, Banrural) declared it would not participate in the financing of the plan,
- 2) The large-scale producers and exporters announced they would not comply with first-phase commitments (alleging that Brazil and Colombia were also in incompliance).

Finally, the change of federal government on 1 December 2001 left this and many other government programmes in a provisional non-compliance.

As of February 2001, the Foro Cafetalero has presented a consensus position, including elements of voluntary retention and paid-for destruction of excess and low-quality beans, which was presented to the agriculture secretary, Javier Usabiaga Arroyo, and consists of the following elements:

- 1) affirm Mexican participation in the APPC retention plan (reducing world supply on the market by 20%, followed by an additional 5%, approximately, in three further harvest years),
- 2) retention of 200,000 sacks by Mexico,
- 3) destroy 100,000 sacks of poor-quality coffee, paid for by the government.

Recently, in July 2001, CNOC has proposed a still more far-reaching plan, whereby 250,000 sacks of low-quality coffee would be purchased (for some M\$61,000,000) and destroyed.<sup>52</sup>

### Production management at country level

The quality of Mexican coffee will be improved with programmes to improve tree stock. Small-scale producer organisations support the gradual elimination of coffee plantations at below 600 meters altitude (above sea level) and the continuing conversion to organic production. Starting in 2001, governmental funds were only available for coffee producers farming above 600 meters altitude. This left between 15 and 20 percent of the national production disqualified.

Additionally, there is support for the introduction of mixed-crop coffee plots, with the inclusion of fruit trees and other associated crops.

The Coordinadora de Pequeños Productores de Café de Chiapas (COOPCAFE) received funds in 2001 from Oxfam International and the State government to investigate possibilities for diversification out of coffee for farmers at low altitudes. Results of the study are not yet available.

In order to control competition during the extraordinary crisis of 2001, coffee producer organisations and the governors of eight coffee-producing states, recommend that the temporary imports of processors with plants in Mexico be limited to a period of 60 days and that the importation of green coffee be prohibited entirely. Furthermore, they recommend the strict phytosanitary control of coffee imports – particularly from Asia. (*La Jornada*, 18 July 2001; 43)

# Mainstreaming of sustainable coffee<sup>53</sup> and fair trade practices

Sustainable, or ecologically-grown and -marketed coffee, is an important initiative among the coffee cooperatives and small-scale producer organisations, though – with the exception of some technical assistance from FONAES and the Sistema Inegral de Desarrollo Rural (SINDER) – the Mexican government has not invested in this strategy. International funders have been crucial to the independent attempts, and significant advances, in this direction (as mentioned in Section 1.4., International Assistance, above). This ecologically-grown coffee is usually associated with fair trade niche marketing (mentioned above, and in the section below). It should be emphasised that sustainable and fair trade practices are

<sup>&</sup>lt;sup>52</sup> Estimating the yield of the average peasant producer at 11.5 sacks of coffee, this would mean that some 21,700 producers were affected. In other words, almost 13% of the 280,000 Mexican producers do not offer a quality of coffee that will permit them to compete successfully in the long run.

<sup>&</sup>lt;sup>53</sup> Though the term "sustainable coffee" remains loosely defined, the efforts of diverse actors – from the Smithsonian Migratory Bird Center, to Oxfam America, Conservation International, Equal Exchange and peasant organisations from the South – have made consistent efforts, since 1993, and crescendoing in the 1996 Sustainable Coffee Congress in Washington D.C., to arrive at consensus strategies. (Rice and McLean, *ibid*, 113 ff., 137)

priority strategies for most of the small-producer coffee cooperatives, particularly among the Indian producers of the Mexican Southeast.

"Sustainable coffee" – featuring organic coffee, shade-grown<sup>54</sup>, bird-friendly<sup>55</sup>, and peasant-grown coffee – is a growth market. The expanding organic foods market in general – showing a tendency in the United States of increasing by 20% per year during the last ten years – is the basis for optimism.<sup>56</sup> Market research in the United States suggests significant prospects for fair trade practices, too. Market research in 1999 showe dthat more than three-quarters of consumers said they would be more likely to buy a product that is associated with a cause about which they care; almost one-third said that, after price and quality, responsible business practice shapes their purchasing decisions; and 20% said they had bought a product or service in the past years associated with a cause or issue. ("1999 Cone/Rope Cause Related Trends Report: The Evolution of Cause Branding", cited in Rice and McLean, 1999, 34, 62).

Progress has been made in inverting the image of small farmer-grown coffee as of lower quality to the recognition of shade-grown (small producer-grown and usually of the older varieties, such as Bourbon and Typical) coffee as of superior taste. If quality is less an issue, the consistency of supplies and their timeliness continue to be concerns of importers, particularly when buying from cooperatives. Of course, any scandal belying the certification of organic coffee is a threat, and has been a reality in the past. Finally, with competition growing among specialty importers, margins are declining. Financial risk, however, is growing as considerable inventory is necessary while the volatility of the coffee market is legend. These are secondary, limiting factors on the expansion of the sustainable coffee market. (Rice and McLean, 1999, 26)

Certification is a necessary added cost involved in marketing – whether it be destined for the organic or fair trade markets.<sup>57</sup> With regard to the organic market, when small farmers organise to contract a large-scale group inspection (over 1.500 132-pound bags), the unit cost of certification is US\$0.03-0.05/lb. (With organic premiums averaging \$0.15-0.20/lb., the cost is clearly justified. Nevertheless, organic producer organisations have a long-

<sup>&</sup>lt;sup>54</sup> "Shade-grown" coffee is a term of loose definition, as it may be paired with organic processes (as in the SMBC initiative) or with integrated pest management – which does permit moderate use of chemical pesticides and fertilizers – as in the Eco-OK initiative. While mass-marketing efforts have focused on the beneficial effects to birds and/or forests, shade-grown coffee can also claim benefits in farm diversification, local species diversity, farm ecology, landscape security and carbon sequestration. (Rice and McLean, 1999, 73-74)

<sup>&</sup>lt;sup>55</sup> It should be noted that the "Bird-Friendly" seal awarded by the Smithsonian Institution, in the US, and marketed by the National Audubon Society was short-lived in 1997. The Audubon Society declared itself unsatisfied with the early results of the initiative – which was supposed to net the Society US\$0.25 for every pound sold. Nevertheless, SMBC still reported efforts on-going by three importers and 10 roasters in the country. (Rice and McLean, 1999, 70)

<sup>&</sup>lt;sup>56</sup> It is commonly stated that certified organic coffee makes up 5% of the specialty coffee market in the United States; estimated organic coffee retail sales are US\$150 million annually. (Rice and McLean, 1999, 62)

<sup>&</sup>lt;sup>57</sup> The International Federation of Organic Agriculture Movements (IFOAM), with headquarters in Thorley-Theley, Germany, issued guidelines for organic coffee in 1995; the same year it issued "Guidelines for Social Rights and Fair Trade". In Mexico, Comercio Justo México, A.C. is a civil society organisation dedicated to promoting fair trade within the country and promoting Mexican products in fair trade markets internationally. Guidelines for the certification of a fair trade product have also been development by Comercio Justo México.

standing demand that international certifiers cooperate more in respecting the results of each other's work. In particular, there is lack of reciprocity between the United States and Europe, with neither side automatically accepting the certification of the other.<sup>58</sup> More important still, certification by local agencies should be respected. (Rice and McLean, 1999, 25) In Mexico, Certimex is a Oaxaca-based certifying agency supported by small-scale cooperative organisations. It has direct contracts from European sellers and its costs are approximately half of what it costs for an international certifier to carry out the same service. The cost of certification by Certimex is equivalent to approximately 10% of the organic premium.

The prospect has been raised that coffee be included, for certification and marketing purposes, as a non-timber forest product (NTFP), like nuts, fronds, and other products privileged by SmartWood and the Forest Stewardship Council – whose interest is agroforestry. However, as coffee is not a native species and usually grown in a rather intensive fashion, it appears unlikely that these certifiers will award coffee the full NTFP category.

In an effort to amplify the fair trade concept, there is an initiative – with a Guatemalan focus – to certify minimum wage and working conditions for estate-grown coffee, based on a Code of Conduct promoted by the European Fair Trade Association and various Dutch agencies, principally the Max Havelaar Foundation. (Rice and McLean, 1999, 83) This strategy has not yet found an echo in Mexico, though large-scale coffee producing plantations merit the attention.

The expansion of environmental and social criteria in the field of sustainable coffees has led to consideration of the benefits and risks of multiple certifications. On the one hand, all available research suggests that consumers in the gourmet, environmental and social responsibility markets are not price-sensitive and do pay the extra 10-20% for their pound of coffee. On the other hand, each certification process does represent an increase in costs – though a composite "super seal" would limit that increase – and retailers are concerned about the growing competitiveness in the specialty market. Certainly, "risk sharing", or spreading the cost of certification and promotion of sustainable coffee through the transaction chain, is highly desirable for the expansion of this strategy.<sup>59</sup> But, as Rice and McLean succinctly put it: "We found no compelling evidence to support the hypothesis that 'seal proliferation' is leading to confusion and 'label fatigue' among consumers." (Rice and McLean, 1999, 89, 122)

Additional issues of interest include:

 Ought markets or standards to come first? (The proliferation of claims – birdfriendly, shade-grown and the rest – go largely uncertified now. Ought the

<sup>&</sup>lt;sup>58</sup> Within the United States itself, the US Department of Agriculture National Organic Program is debating whether to oblige certifiers within the country to respec eachother's work, unless there was the claim to "meet and exceed" the national standard. (Rice and McLean, 1999, 66)

<sup>&</sup>lt;sup>59</sup> Let it not go unheeded that the World Trade Organisation's "Production and Process Methods" (PPMs) considerations may represent a challenge to the sustainable coffee strategy, as it suggests that only the physical characteristics of a product – not the procedures by which it was made – ought to be considered in product differentiation. (Rice and McLean, 1999, 95)

standards to come first or ought the market to lead the way? Said in other terms, ought business or no-profits lead the way?

- In the certification procedures, ought there to be absolute standards or a point system? (Also, can "sustainable coffee" include integrated pest management procedures which allow some use of agro-chemicals?)
- Could a Code of Conduct be developed for the sector, at the international level?
- Ought there to be more attention to sustainability issues and labelling initiatives in the consumer countries (regarding waste reduction and energy conservation in roasting and retailing)?
- Education and communication are key, including: consumer awareness-raising; roaster and retailer education as to labelling and sustainability; information networks such as a common data pool (including on production research and on labelling initiatives) and a policy watch would inform NGO, producer, marketing, and governmental interested parties.

(Rice and McLean, *ibid*, 105 ff.)

# Increase domestic demand

Producer organisations have long recognised the opportunity to improve the income of their members by increasing the local demand for coffee. As stated above, Mexico currently has a very low consumption of coffee, and it tends to be low-quality coffee, whether in low-income homes (with a noted preference for a heavily-sugared Nescafé) or in even high-end restaurants. Knowing how Brazil raised consumption from 9,100,000 to 12,100,000 sacks a year in the short period between 1994 and 1999, the dynamic Mexican economy doubtlessly should be able to raise its own domestic demand.

In 2001, the agricultural secretariat initiated a publicity campaign, with newspaper advertisements, to raise consciousness of the pleasures of the brew.

The gourmet market is now highly visible in middle-class and prosperous sections of Mexico City and other cities. Chiapas' Union de Ejidos de la Selva was the pioneer in entering the gourmet retail market, including coffee shops. There are now a dozen such La Selva cafés in Mexico City, and various other cities. And other coffee organisations, in Chiapas, Oaxaca, and elsewhere have entered the market. Indicators suggest that the strategy is modestly profitable. At the same time, it should be noted that product differentiation and brand-name development are strategies that may function better regionally and locally than nationally and internationally. The plethora of name brands may rather create confusion outside of the zone of production, and conglomerate secondtier differentiation – particularly around fair trade and organic criteria – is an idea in development, as noted below.

The national government included organic production in agricultural guidelines developed in the early 1990s; however the policy discussion concerning accreditation/certification, as well as brand-name policy and even intellectual property rights, are all issues still under active consideration, which will eventually establish a framework for more active development of local markets in sustainable coffee..<sup>60</sup>

The concept of fair trade – extensive in Europe and growing in the United States and Canada – is also figuring as a marketing strategy for the Mexican market – as well as for export. Various civil society organisations, including prominently coffee-producer grassroots organisations, banned together and, in 2001, established a national organisation, Comercio Justo México, A.C., and a "Mexican seal of fair trade", with the strategy of raising consciousness locally and assuring the quality and providence of the certified products for both national and international markets. "Agro-mercados" is an associated marketing enterprise committed to promoting fair trade of peasant-produced products.

### Environmental considerations in production

Agroecological practice has been promoted through two governmental programmes: Fondo Nacional de Empresas en Solidaridad (FONAES) offers support for technical assistance in organic coffee, and the Sistema Integral de Desarrollo Rural (SINDER) also offers resources to pay professional services in organic agriculture.

But it is the coffee-producer organisations – aided in part by international funders – which have committed important resources to creating an environmentally friendly system of coffee production. Independent coffee organisations formed a local certifying body, CERTIMEX, to pre-inspect production in agroecology, commissioned by international inspectors such as Naturland and the OCIA. CERTIMEX is able to certify European ISO norms.

There are advances in the reducing negative environmental impacts. Mobile washing stations ("*beneficios húmidos*") can de-pulp coffee with very little water and can be moved to the coffee plots themselves. A closed-loop processing system will protect water sources from contamination. Pulp composting is a method for reducing contamination. The solar coffee dryer, reducing air pollution and energy use, are the subject of experimentation in Central America. (Rice and McLean, 1999, 92)

# Gender considerations

As a result of the decline in importance of coffee to the family economy, and of the increased emigration of men in search of work, women are assuming greater responsibilities for coffee production. This has not been fully incorporated into the functioning of the family or coffee organisations, nor certainly by policy-makers. It was found, for an example in an area of higher emigration, in the Unión de Ejidos General Lázaro Cárdenas del Río, in Cacahoatán, Chiapas, over 33% of the producers were women. (Velazco, *Ecofronteras*, October 2000)

<sup>&</sup>lt;sup>60</sup>ECO-OK, the Rainforest Alliance's coffee certification programme, has provided assistance in the refinement of standards in Mexico. (Rice and McLean, 1999, 51)

### Development of processing capacity

The call for vertical integration and capturing added value through participation in the transformation process has been the dominant strategy among independent coffee-producer organisations (together with assuming marketing functions) since the late 1980s. At present, with many organisations in possession of their own processing plants, the emphasis falls on the improvement of the efficiency of those plants (particularly with electronic bean-selectors), and also on extending the wet-processing capacity within producer families and communities. Of particular concern is inadequate fermenting and drying, in the moment of "wet-processing", which reduces significantly the quality of the final product. Certainly when confronting the low-investment practice of drying coffee in nylon sacks (where differences in temperature at the edges and deep within the sacks produces a poor-quality drying process), coffee organisations look to the construction of cement washing tanks.

ProCampo offers limited funds for the latter; in 2001, there are funds for the construction of a mere 4,000 such facilities in the state of Chiapas.

### Increase access to credit and capital

If small-producer cooperatives are to expand their role in the coffee economy, they must access working capital to purchase the product in sufficient quantities to supply international toasters directly, thus cutting out the intermediaries whose principal attraction has been their capacity to pay upon receipt. Even medium- and large-scale producers find, with the historically low prices of 2001, that they have no access to commercial bank loans.

The coffee sector is united in demanding governmental intervention to provide access to capital for investment, diversification, and, in terms of the emergency, for survival. Past loans must be restructured, since many coffee-producers are unable to service them in the present situation of net out-flow. The Banco Nacional de Comercio Exterior (National Export Bank, BANCOMEXT) and Bank of Mexico's Fideicomisos Instituidos en Relación con la Agricultura (Trust Funds Related to Agriculture, FIRA) should be capitalised to offer long-term loans when seen as viable.

An emergency fund, operated by the agricultural ministry, should be established to compensate coffee producers for the extraordinary losses of the 2000-2001 harvest. It is calculated that a fund of M\$3,000 million (some US\$333 million) would cover 10% of the projected losses in 2001 of producers in the sector. Thereafter, a stabilisation fund is proposed into which capital would be transferred in years in which coffee received better prices and out of which capital would go to producers to compensate for poor years. The World Bank has been identified as an appropriate source for seed money for this stabilisation fund (in the name of justice, because it was World Bank policy to make

Vietnam a major coffee exporter, thus contributing in an important way to the present crisis).<sup>61</sup>

It is interesting that organic coffee production has influenced the thinking regarding financing of the sector and, as an adjunct argument, producer organisations have mentioned the demand for payment for environmental services, recognising that shade-grown coffee figures in the sequestration of carbon, the support of biodiversity, and other environmental services.

# Policies and market regulation in support of small producers

Technical assistance in production is costly when individualised by small-producer. Yet the state has maintained a neo-liberal hands-off policy respecting this crucial service; the independent organisation have taken on the task of providing these services.

Lamentably, the Mexican government allows a product with up to 30% non-coffee ingredients (sugar, etc.) to legally claim to be "100% pure coffee". This policy keeps prices low, particularly in the countryside where this adulterated product finds its greatest market.

The Foro Cafetalero (in its letter of 8 February 2001) argues that the government should:

- 1) review and limit import licensing for coffee,
- 2) promote more aggressively the internal consumption of coffee,
- 3) review the Ley de Torrefacción and the norms guiding the marketing of coffee within the country.

# Policies to improve Mexico's world position

The government is not willing to make a significant investment nor has a policy regarding improving Mexico's world position in coffee at this time.

There is a bind. At this point, Mexican coffee is predominantly sold in the United States, country with which Mexico has a free trade agreement and proximity, as competitive advantages. However, projections for demand in the United States are less sanguine than for Europe – with which Mexico also has a free trade agreement – but is not as competitively located. Although consumption is also increasing in Japan, Mexico does not have notable competitive advantages in that market either.

Indeed, Mexico's profit margin is narrower than that of Brazil or Colombia (though not of Central America). (Instituto Maya 1999; 75)

# Labour standards on plantations

<sup>&</sup>lt;sup>61</sup> These proposals are part of the Puebla meeting of governors from coffee-producing states, on 17 July 2001. (*La Jornada*, 18 July 2001; 43)

The labour needs of Soconusco plantations, particularly heavy during the harvesting of coffee (November to February) are filled almost entirely by Guatemalans, many of whom now receive permission from the National Migration Institute to remain in the country for up to a year. A study by the academic institution, Colegio de la Frontera Sur (Ecosur) starting in 1997 found that for every 10 men, there was one woman migrant worker registered, but that 26% of the men were "accompanied" by women and children – the great majority of whom certainly constitutes an unregistered, and under-protected, additional workforce. Some 32% of these agricultural workers are illiterate. Of the 67,633 migrants who registered with the Mexican government in 1997, 76% had the paperwork involved in receiving their permission taken care of by profession "contratista" labour intermediaries. Ángeles, *ECOfronteras*, 2000)

Greater monitoring of Mexican law (in the Constitution and the labour Law) is needed to guarantee minimum health and labour standards on the coffee plantations. This involves on-site review of practise and increasing penalties for non-compliance of the law.

### Diversification within, and out of, coffee

Economic policy dictates diversification of risk, regardless of the level of activity of the actor. With reference to the peasant family, policy-makers must lend special attention to an over-reliance on coffee as an income-generating strategy when many economists forecast a continuing secular downward trend in coffee prices. Cooperatives and small-producer organisations have identified this problem for some years. In particular, those committed to organic coffee have invested some resources in exploring and promoting the extension of organic practice to other agricultural products. There is an ever-present seldom-dominant movement to reinforce agricultural activity for self-consumption (and thus improvement in the supply of basic needs). There has also been an emphasis in working with the women associated with the coffee organisations. In the case of CEPCO, in Oaxaca, in particular, a successful women's savings and loan programme is in place, as well as a project to train women in microenterprise activity.

More radically, it is also true that coffee grown in inhospitable circumstances (in particular, below 600 meters altitude) produces a quality of bean that is unlikely to find a market in the future.

#### BIBLIOGRAPHY

- Ángeles, Hugo. "Trabajadores guatemaltecos" in *ECOfronteras*. Colegio de la Frontera Sur, Chiapas. October 2000.
- Bartra, Armando. 1996. El México bárbaro. Plantaciones y monterías del sureste durante el Porfiriato. Ed. El Atajo. México, D. F. 516 p.

Carlton, Jim. "A Global Effort for Poor Coffee Farmers", *The Wall Street Journal*, 23 November 1999.

Celis, Fernando, R. Cobo, A. García, P. López, J. Moguel, A. Olvera, L. Paré, L. Paz, F. Pérez, G. Ejea y L. Hernández. 1991. Cafetaleros. La construcción de la autonomía. CNOC. México, D. F. 192 p.

Celis, Fernando. 1999. Análisis sobre las importaciones de café. En: Revista "Cafés de México" (123) : 11-16. Enero de 1998.

Celis Callejas, Fernando. 2000. Nuevas formas de asociacionismo en la cafeticultura mexicana: el caso de la Cnoc. Mecanoescrito, s/p. Xalapa, Ver.

Celis, Fernando. 2001. La dinámica del mercado mundial y su impacto en la cafeticultura mexicana. Mecanoescrito, s/n.

CEPCO, Coordinadora Estatal de Productores de Café de Oaxaca. 2000. Informe de actividades 1998-2000. Oaxaca de Juárez, Oaxaca. 154 p.

Collier, George. *Basta! Land and the Zapatista Rebellion in Chiapas*. The Institute for Food and Development Policy. 1994.

Consejo Mexicano del Café. 1996. Estadística cafetalera 1984-85/1994-95. Mecanoescrito. S/p.

Escamilla Prado, Esteban. 1990. Evaluación técnica-económica de plantaciones de café en el sistema de policultivo comercial en Veracruz. En: Revista "Cafés de México" (132) : 21-22. Enero de 1999.

Escamilla Prado, Esteban. 1993. El café cereza en México. Tecnología de la producción. Universidad Autónoma Chapingo, CIESTAAM y Dirección de Centros Regionales. Chapingo, Estado de México. 116 p.

FONAES, Fondo Nacional de Empresas en Solidaridad. 1996. Situación del Mercado del Café. Mecanoescrito. S/n.

Gobierno del Estado de Chiapas. Plan de Gobierno 2000-2006. Mecanoescrito, s/p. Tuxtla Gutiérrez, Chiapas.

Hernández N., Luis. 1996. Café: La pobreza de la riqueza/la riqueza de la pobreza. En: Memorias del Primer Congreso de Café Sustentable. Washington, D. C. Rice, Harris y McLean, Eds. Smithsnonian Migratory Bird Center. Pp 75-90.

Hernández N., Luis. 2000 . Sueños de café. En: Café Orgánico. Uciri-Cepco-Majomut. Fonaes. México, D. F. pp 27-48.

Instituto para el Desarrollo Sustentable en Mesoamérica (IDESMAC). 1998. Proyecto de Mejoramiento del hábitat en paisajes productivos en la Reserva de la Biosfera El Triunfo, Chiapas, México. Mecanoescrito. S/p.

Instituto Nacional de Estadística Geografía e Informática (INEGI). 1996. Conteo de Población y Vivienda 1995. Resultados definitivos, tabulados básicos. Chiapas, Tomo II. Aguascalientes, México. 1071 páginas.

INMECAFE-Nestlé. 1990. El cultivo del cafeto en México. México, D. F. 248 p.

Instituto Maya, A.C., "Estudio de Gran Visión: Café"; commissioned by Fondo Social Banamex; Diciembre 1999.

ISMAM. Indígenas de la Sierra Madre de Motozintla. 1990. Manual práctico del cultivo biológico del café orgánico. México, D. F. 334 p.

Juárez, Roberto (gerente), Asociación Mexicana de Exportadores del Café, A.C., entrevista el 12 de julio de 2001.

Martínez Quezada, Álvaro. 1995. Crisis del mercado y cafeticultura campesina en los Altos de Chiapas. Universidad Autónoma Chapingo. México.

Martínez Torres, Eduardo y W. Peters Grether. 1995. Cafeticultura orgánica biodinámica en la sierra madre de Chiapas, México, 1963-1993. En: Memorias de la Conferencia Internacional sobre Café Orgánico. Tapachula, Chiapas. Ed. Universidad Autónoma Chapingo, Asociación Mexicana de Agricultores Ecológicos y Federación Internacional de Movimientos de Agricultura Orgánica. Páginas 13-26.

Martínez Veloz, Jaime. "El desastre del café y la marcha zapatista", *La Jornada*, 9 February 2001.

Nigh, Ronald. 1992. La agricultura orgánica y el nuevo movimiento campesino en México. Antropológicas Nueva época No. 3 :39-49.

Nolasco, Margarita. 1985. Café y sociedad en México. Centro de Ecodesarrollo. México, D. F. 453 p.

Ordóñez M., César. s/f. Crisis del café y mercado de trabajo en la zona cafetícola de los Altos de Chiapas. Revista de Geografía Agrícola. Universidad Autónoma Chapingo. En prensa.

Pech Chuc, Julián F. 1996. Manejo sustentable para el café y cítricos en el campo experimental de Ixtacuaco, Ver. Tesis Profesional. Universidad Autónoma Chapingo. Chapingo, Estado de México. 115 p.

Pérez-Grovas G., Víctor, Marvey López V., Walter Anzueto A., Fernando Rodríguez L., y Eliseo Gómez H. 1997.El cultivo de café orgánico en la Unión Majomut. Un proceso de rescate, generación y divulgación de tecnología agrícola. Red de Gestión de Recursos Naturales-Fundación Rockefeller. México, D. F. 64 p.

Pérez-Grovas G., Víctor. 1998. Evaluación de la sustentabilidad del sistema de producción de café orgánico en la Unión Majomut en la región de los Altos de Chiapas. Universidad Autónoma Chapingo. Chapingo, Estado de México. 96 p.

Rodríguez Ramírez, Leopoldo. 1994. Sistemas de policultivo comercial de café, en la zona centro de Veracruz. Tesis Profesional. Universidad Autónoma Chapingo. Chapingo, Estado de México. 220 p.

Renard, Marie-Christine. 1999. Los intersticios de la globalización. Un label (Max Havelaar) para los pequeños productores de café. Centre Français d'Etudes Mexicaines et Centroaméricaines (CEMCA). México, D. F. 340 p.

Rice, Paul D., and Hennifer McLean. *Sustainable Coffee at the Crossroad*. White Paper prepared for The Consumer's Choice Council, October 5, 1999.

SAGAR, Secretaría de Agricultura, Ganadería y Desarrollo Rural. 1999. Claridades agropecuarias. Edición especial de la Revista de Apoyos y Servicios a la Comercialización Agropecuaria, ASERCA. México, D. F. 36 p.

Santoyo Cortés, Horacio, S. Díaz Cárdenas y B. Rodríguez P. 1995. Sistema agroindustrial café en México. Universidad Autónoma Chapingo. México. 176 p.

Sosa Maldonado, Lucino y Jaime González V. 1995. Café Orgánico. Control de calidad. Universidad Autónoma Chapingo. Dirección de Centros Regionales. Chapingo, Estado de México. 29 p.

Sosnowchik, katie. Green@Work. September-October 2000, pp. 21-29.

Van der Valk, Olga. 1991. Reporte del Estudio de mercado del café en México. CNOC. México, D. F. Mecanoescrito, s/p.

Velazco, Patricia. "Hombres y Mujeres en el Proceso Productivo", *ECOfronteras*. Gaceta ECOSUR, Chiapas, October 2000.

Villafuerte, Daniel (Coordinador). 1993. El café en la frontera sur. La producción y los productores del Soconusco, Chiapas. Instituto Chiapaneco de Cultura. Tuxtla Gutiérrez, Chiapas. 136 p.

Waridel, Laure et al. *Un café por la causa: Hacia un comercio justo*. Equiterre and Acción Cultural Madre Tiera, A.C. México, 2001

Wille, Chris; "The Birds & the Beans" in Audubon, November-December, 1994. pp.58-64.